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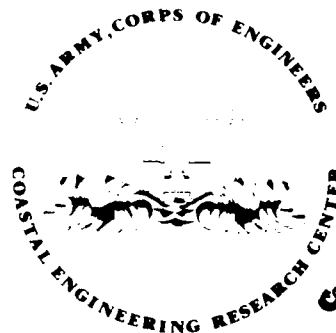
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Beach Profile Analysis System (BPAS)

Volume VIII

Supporting Appendixes for BPAS User's Guides

by

Marilyn V. Fleming and Allan E. DeWall

TECHNICAL REPORT NO. 82-1 (VIII)

JUNE 1982

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

A package of computer programs for editing, analyzing, and displaying beach profile survey data has been developed. The eight-volume package, named the Beach Profile Analysis System (BPAS), consists of an overview of the BPAS program, two editing programs, five analysis programs, and supporting appendixes.

(continued)

The first editing program checks for missing or unreasonable data, surveying or note-reducing errors, and improper arrangement of data cards. The second editing program assumes that most errors have been corrected and, while it does some minor editing, its major function is to sort, reformat, and store the data on the selected permanent storage media. It is also used to update or extract data from existing files and performs some preliminary data analysis.

The analysis programs compute changes in shoreline position, selected contour positions, sand level, sand volume, and statistical trends and correlations. The results are plotted in a number of ways for display purposes. Output can be specified for English or metric units and can be referenced to any horizontal or vertical datum. Contour positions, including the shoreline position, are interpolated linearly between adjacent surveyed points on the profile. If a survey does not cross the datum elevation, but does reach a specified minimum elevation (e.g., +2 feet MSL), the shoreline position can be extrapolated using the two seawardmost points. Before computing volume changes, common bonds are established relative to the landward and seaward extent of the surveys on each profile line. The computed area under each profile is then expressed in terms of a "unit volume" for a shore-normal slice that is one unit wide. Rates of change in shoreline position and unit volume are computed by linear regression analysis.

The BPAS package has been designed for use primarily on the CDC 6600 computer, although much of the coding was done in standard FORTRAN for use on other systems.

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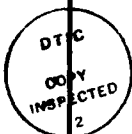
PREFACE

This report is published to provide coastal engineers with the documentation of a package of computer programs for editing, analyzing, and displaying beach profile survey data. This package, named the Beach Profile Analysis System (BPAS), was needed for the analysis of a large data bank of field and laboratory profile surveys. The work was carried out under the U.S. Army Coastal Engineering Research Center's (CERC) Beach Profile Studies work unit, Shore Protection and Restoration Program, Coastal Engineering Area of Civil Works Research and Development.

This report (Vol. VIII), the last of eight volumes, contains supporting appendixes that provide information on data collection formatting and restrictions, computational procedures, assumptions, and error messages not repeated in the other volumes.

The report was prepared by Marilyn V. Fleming, Systems Analyst, under the supervision of P. Pierce, Chief, ADP Office, with the assistance of Allan E. DeWall, Geologist, under the supervision of C.J. Galvin, former Chief, Coastal Processes Branch, and Mr. R.P. Savage, Chief, Research Division.

Instrumental insight concerning a previous version of the Beach Profile Analysis System was provided by B. Sims. Programing was accomplished by M. Fleming and T. Lawler with the assistance of D. French, J. Alquist, R. Hylton, and F. Wilson.

The authors acknowledge the helpful discussions and review comments of Drs. C. Everts, C. Galvin, R. Hallermeier, and C. Vincent, and W. Birkemeier, M. Hemsley, T. Lawler, H.C. Miller, B. Sims, and P. Vitale.

Technical Director of CERC was Dr. Robert W. Whalin, P.E., upon publication of this report.

Comments on this publication are invited.

Approved for publication in accordance with Public Law 166, 79th Congress, approved 31 July 1945, as supplemented by Public Law 172, 88th Congress, approved 7 November 1963.

TED E. BISHOP
Colonel, Corps of Engineers
Commander and Director

VOLUME VIII

CONTENTS

CONVERSION FACTORS, U.S. CUSTOMARY TO METRIC (SI) UNITS OF MEASUREMENT

U.S. customary units of measurement used in this report can be converted to metric (SI) units as follows:

Multiply	by	To obtain
inches	25.4	millimeters
	2.54	centimeters
square inches	6.452	square centimeters
cubic inches	16.39	cubic centimeters
feet	30.48	centimeters
	0.3048	meters
square feet	0.0929	square meters
cubic feet	0.0283	cubic meters
yards	0.9144	meters
square yards	0.836	square meters
cubic yards	0.7646	cubic meters
miles	1.6093	kilometers
square miles	259.0	hectares
knots	1.852	kilometers per hour
acres	0.4047	hectares
foot-pounds	1.3558	newton meters
millibars	1.0197×10^{-3}	kilograms per square centimeter
ounces	28.35	grams
pounds	453.6	grams
	0.4536	kilograms
ton, long	1.0160	metric tons
ton, short	0.9072	metric tons
degrees (angle)	0.01745	radians
Fahrenheit degrees	5/9	Celsius degrees or Kelvins[1]

[1]To obtain Celsius (C) temperature readings from Fahrenheit (F) readings, use formula: C = (5/9) (F -32).

To obtain Kelvin (K) readings, use formula: K = (5/9) (F -32) + 273.15.

GLOSSARY OF TERMS

BENCH MARK - A permanently fixed point of known position and elevation.

CONTOUR - A line of constant elevation along the beach surface.

   CONTOUR INTERCEPT - The point defined by the seawardmost intersection of a contour with a beach profile. On some profiles, there may be more than one intercept of a given contour, (e.g., MULTIPLE INTERCEPT).

   CONTOUR POSITION - The intersection of a horizontal plane and the beach surface.

DATUM INTERCEPT - The seawardmost point where a profile crosses the VERTICAL DATUM plane (e.g., the SHORELINE POSITION).

DATUM, VERTICAL - The zero elevation.

   INPUT - The vertical datum to which survey input data are referenced.

   OUTPUT - The vertical datum to which the data represented in output plots and tables are referenced.

DATUM, HORIZONTAL - The zero distance.

   INPUT - The horizontal datum, usually BENCH MARK, to which survey input data are referenced.

   OUTPUT - The horizontal datum to which the data represented in output plots and tables are referenced (e.g., SHORELINE POSITION during REFERENCE SURVEY, dune crest position, etc.).

DEFAULT VALUE - The value automatically assigned to a variable when no value is assigned by the user.

DISTANCE - The horizontal coordinate of a point on a beach PROFILE, measured positively seaward from a fixed point on the PROFILE LINE (e.g., BENCH MARK).

ELEVATION - Vertical coordinate of a point on a beach PROFILE measured positively upward from a known VERTICAL DATUM.

EXTRAPOLATED DATUM - The SHORELINE position when it has been extrapolated using the last two surveyed points.

INPUT UNITS - Units of measurement in which the survey input data are recorded.

LANDWARD BOUNDARY - The distance identifying the landward end of the PROFILE.

LOCALITY - A unique place where survey data are located (e.g., Atlantic City, Bodie Island, etc.).

LOCALITY CODE - Two-character representation of the locality.

LOCALITY DESCRIPTION - User-supplied name of the locality or a description of the data.

MULTIPLE INTERCEPT - A point where a specific CONTOUR crosses the PROFILE that is in addition to the seaward intercept.

OUTPUT UNITS - Units of measurement of data displayed on output plots and tables.

PROFILE - The curve defined at the intersection of the ground surface with a vertical plane inserted perpendicular to it.

    PROFILE AREA - The area bounded above by a PROFILE, landward by a vertical line, below by a horizontal line and seaward by a vertical line.

    PROFILE ENVELOPE - The area bounded by the maximum and minimum elevations found at distances along a PROFILE LINE.

    PROFILE LINE - The line defined by two fixed points or by one fixed point and a known angle, along which surveyors measure distances and elevations to define a beach PROFILE.

    PROFILE LINE NUMBER - The unique number assigned to each PROFILE LINE.

REFERENCE SURVEY - The survey of a PROFILE LINE which defines a standard value to which subsequent values are referenced (e.g., SHORELINE position or UNIT VOLUME).

SEAWARD BOUNDARY - The distance identifying the seaward end of the PROFILE. UNIT VOLUME is computed from this point landward.

SHORELINE - The seawardmost intercept of the VERTICAL DATUM plane with the beach.

SPATIAL MEAN - The mathematical average of a set of variables collected from a number of PROFILE LINES during a single SURVEY.

SURVEY - An event during which one or all of the PROFILE LINES at a LOCALITY are surveyed.

SURVEY NUMBER - The unique number assigned to each set of profile data surveyed during the same time.

TEMPORAL MEAN - The mathematical average of a set of variables collected during a number of SURVEYS at a single PROFILE LINE.

UNIT VOLUME - The product of a cross-sectional area and a unit of length perpendicular to the area. Given as units of volume per length of shoreline (e.g., m^3/m or yd^3/ft).

    UNIT VOLUME BY CONTOUR - Unit volume computed within slices bounded by specific CONTOURS.

UNIT VOLUME, ZERO - The unit volume which establishes the standard for
computing change in unit volume during SURVEYS of a PROFILE LINE.
This volume is subtracted from volumes found during other SURVEYS.

UNIT VOLUME, CHANGE - The difference between unit volumes measured during
two SURVEYS.

APPENDIX B

COMPUTATIONAL PROCEDURES

CONTENTS

SYMBOLS AND DEFINITIONS

A an area

C conversion factor to convert area to unit volume

c elevation of a contour

d distance from a profile line to the adjacent one

H_{tot} hours elapsed since the time of first survey

i integer identifying position (i=1 for landwardmost) of coordinate pair in the array defining a surveyed profile line

j number of surveys of a locality

k number of surveys for which a value can be computed or defined

     integer identifying each survey

M_{comp} months elapsed since time of first survey

M_{tot} months elapsed from the beginning of the year of a particular survey

m integer identifying each profile line at a locality

n number of profile lines at a locality

p a selected distance on a profile line

q the number of distance and elevation pairs defining a survey of a profile line

r correlation coefficient

S slope of a line

s subscript identifying a mean as spatial

T_0 zero time, the time the earliest survey in the survey data file was taken

t subscript identifying a mean as temporal

u distance along the beach from the end profile lines for which the computed distance to a contour may be considered valid

V unit volume of a profile

w weighting factor used to compute spatial means

XLAND   landward distance boundary for area computations

SYMBOLS AND DEFINITIONS--Continued

XSEA	seaward distance boundary for area computations
X, Y	independent and dependent variables used in regression analysis
x	surveyed or computed distance coordinate on a profile
YMAX	upper elevation boundary for area computations
YMIN	lower elevation boundary for area computations
y	surveyed or computed elevation coordinate
α	intercept of regression line
β	regression coefficient
σ	standard deviation

APPENDIX B

COMPUTATIONAL PROCEDURES

I. EXTRAPOLATION OF SHORELINE POSITION

Since some records may not be included in certain computations because the profiles they describe do not extend to the shoreline, the user may decide that the distance to the shoreline should be extrapolated and added as a surveyed point. When allowing extrapolation, the user is assuming that the beach slopes evenly from a selected minimum elevation to the shoreline. The criteria for extrapolation are as follows:

(a) The elevation of the last surveyed point must not exceed the selected minimum elevation.

(b) The slope of the line connecting the last two surveyed points must be negative (beach is sloping seaward).

Using the last two surveyed points in the record, (x_i, y_i) and (x_{i+1}, y_{i+1}) and the elevation at the shoreline, 0, the equation of the line connecting the last two points is solved for the distance to the 0 elevation:

$$ x = x_{i+1} - \frac{y_{i+1}(x_i - x_{i+1})}{(y_i - y_{i+1})} \tag{B-1}$$

This point is added to the record as the last surveyed point and a flag set for the record indicating that the shoreline was extrapolated. All output results computed using extrapolated data are flagged. For all further computations, the record is treated as if it had a shoreline.

II. COMPUTING DISTANCES TO GIVEN ELEVATIONS

This computation is utilized in the BPAS routines to interpolate the distance to the shoreline and in any instance when it is necessary to find the distance at a specific elevation, but its most extensive application is in the analysis module SURVY2 which computes and displays distance and changes in distance to selected contours. To find the seawardmost distance to these contours, each surveyed point, beginning with the seawardmost and proceedings landward, is tested until the elevation of the desired contour is either the same as the elevation of a surveyed point or falls between the elevations of two adjacent surveyed points. When the elevation is the same, the distance is as surveyed and no further computation is required. Otherwise, the equation of the line through the two adjacent points, (x_i, y_i), (x_{i+1}, y_{i+1}), is solved for the distance coordinate at the desired elevation, c:

$$ xc = x_{i+1} + \frac{(c - y_{i+1})(x_i - x_{i+1})}{(y_i - y_{i+1})} \tag{B-2}$$

For each contour, a flag is set to indicate whether the distance was surveyed or interpolated, whether the computation required the use of an extrapolated shoreline position, or whether the desired contour was undefined by the survey data.

At times, a contour may be defined on a profile more than once, such as when a dune or a sandbar is surveyed (Fig. B-1). Provision has been made to compute and display the distance to up to 10 of these multiple intercepts if such is desired. Unless otherwise indicated, however, only the distance to the seawardmost will be computed. In further computations involving contour positions, the seawardmost distance is used.
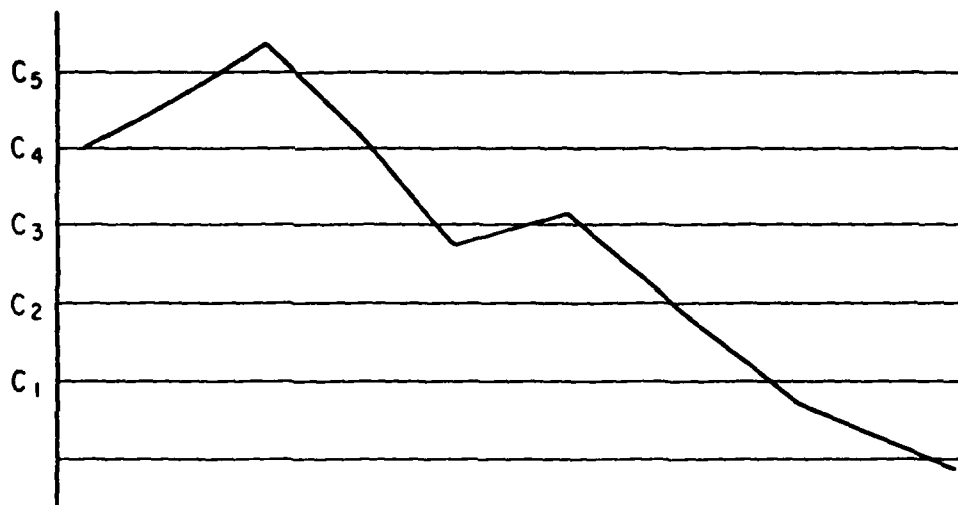
Figure B-1. Multiple contour intercepts. The contours C_3, C_4, and C_5 all have "multiple intercepts" on the defined profile.

III. DETERMINING THE SLOPE OF A PROFILE AT THE SHORELINE

In the BPAS routines, the slope at the shoreline of the profile defined by each record is computed. When the shoreline position is interpolated, the slope of the line through the two points between which it falls is used. If the shoreline is defined by a surveyed or extrapolated point, the slope of the line through the shoreline and the next landward point is used:

$$S = \frac{y_{i+1} - y_i}{x_{i+1} - x_i}$$

(B-3)

IV. COMPUTING MEAN DISTANCE--TEMPORAL

The temporal mean is a simple mean used to determine the mean position of a contour at a profile line considering all surveys taken at that line. It is used to compute the mean shoreline position in the BPAS routines, when such is selected as output horizontal datum, and in the BEACH analysis module. In analysis module SURVY2, the mean position of selected contours at each profile line is computed using this method. The mean is determined by adding the

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distance to the contour for each survey of the profile line and dividing by the number of surveys during which the distance could be computed. Surveys during which the distance could not be defined, because the contour did not exist, are ignored.

Letting

i be a consecutive integer identifying each survey of the profile line,

$x_{c,i}$ be the distance to the contour c during survey i,

$x_{c,i}$ be 0 for surveys during which the position of contour c cannot be defined,

j be the total number of times the profile line is surveyed, and

k be the number of surveys during which an x_i can be computed.

The mean contour position for contour c at each profile line:

$$(\bar{x}_c)_i = \frac{\sum\limits_{i=1}^{j} x_{c,i}}{k} \tag{B-4}$$

V. COMPUTING MEAN DISTANCE--SPATIAL

Analysis module SURVY2 is the only module which utilizes this procedure. It yields the mean position of the selected contours for a given survey. The position of each contour on all profile lines surveyed is considered and a weighted mean is computed. The weighting factor for each profile line is unique and based on the following assumptions:

(a) The profile lines are parallel.

(b) Each profile is representative of the beach for a distance halfway to the adjacent ones; the user must provide an appropriate representative distance for the end profile lines.

The user provides the distance between the adjacent profile lines; if none are supplied, the lines are assumed to be equidistant and a simple mean is computed. Using the profile spacing provided, the weighting factor is computed for each profile line by adding half the distance to the profile line to its left to half the distance to the one on its right (Fig. B-2). The distance to each contour at each profile line is multiplied by the weighting factor for that line and the results added for all the lines. This sum is divided by the sum of all the weighting factors to determine the mean spatial position for each contour.
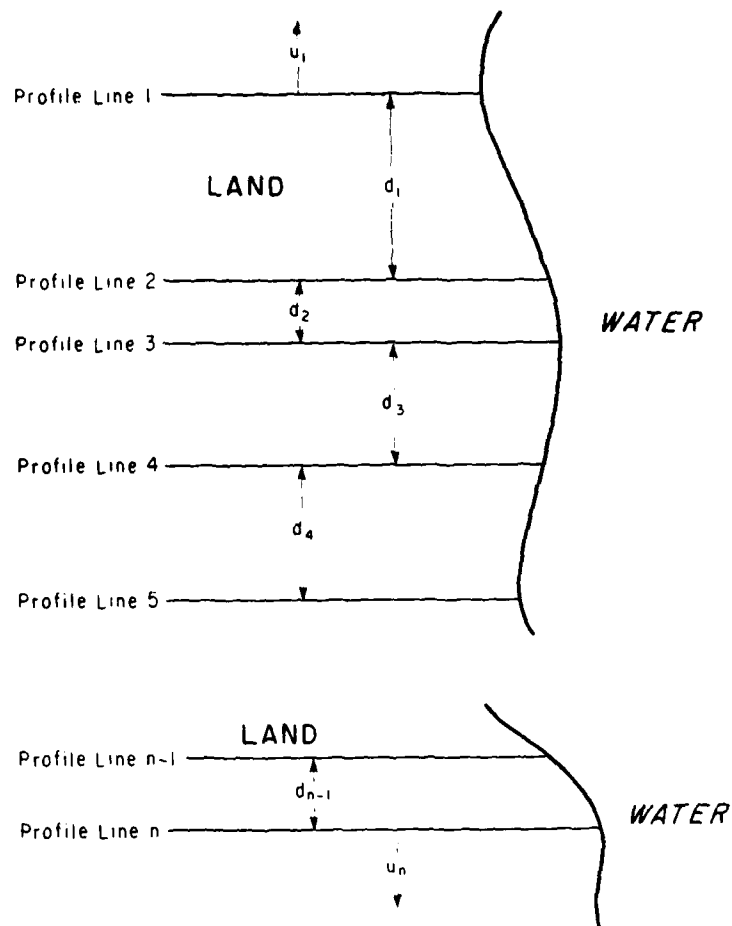
Figure B-2. Distances used to determine the weighting factor.

Letting

m   be a consecutive integer identifying each profile line at the locality,

n   be the number of profile lines at the locality,

u_1, u_n be the representative distances for the end profile lines, and

d_m be the distance from profile line m to m + 1 (Fig. B-2).

The weighting factors for the end profile lines

$$w_1 = u_1 + \frac{d_1}{2}$$

(B-5)

and

$$w_n = u_{n} + \frac{d_{n-1}}{2}$$

(B-6)

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The weighting factor for each internal profile line

$$w_m = \frac{d_{m-1}}{2} + \frac{d_m}{2}$$

(B-7)

and letting

x_{c_m} be the distance to the seawardmost intercept of contour c, and

w_m be 0 for profile lines not surveyed or at which the position of contour c is not defined.

The mean position of the contour c during each survey

$$(\overline{x}_c)_S = \frac{\sum\limits_{m=1}^{n} w_m x_{c_m}}{\sum\limits_{m=1}^{n} w_m}$$

(B-8)

It should be noted that when a contour cannot be defined at a profile line, it is as if the profile line and the part of the beach represented by it *do not exist* (Fig. B-3).
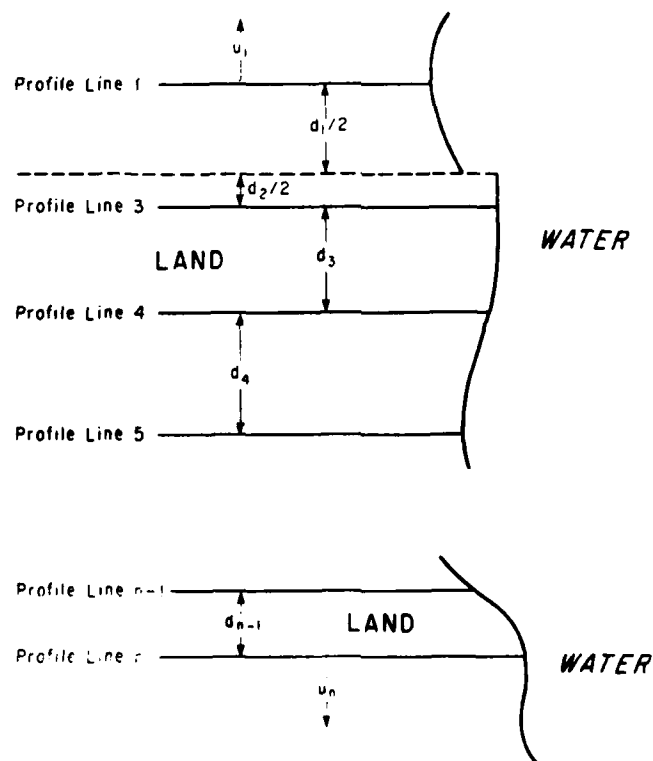
Figure B-3. Spatial mean contour position when the contour for which the spatial mean is being computed is not defined at profile line 2.

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VI. COMPUTING MEAN DISTANCE--SPATIAL-TEMPORAL

Used exclusively by analysis module SURVY2, the spatial-temporal mean is computed to give an average profile at a locality as defined by all surveys taken at that locality. It is the temporal mean of the position of each selected contour computed using the spatial mean of the contour found during each survey.

Letting

ℓ be a consecutive integer identifying each survey at a locality,

$(\overline{x}_c)s_\ell$ be the mean position of the contour c at the locality during survey ℓ,

$(\overline{x}_c)s_\ell$ be 0 for surveys during which it cannot be computed,

j   be the number of surveys at the locality, and

k   be the number of surveys at the locality during which $(x_c)s_\ell$ was defined.

The mean contour position for contour, c

$$\overline{x}_c = \frac{\sum_{\ell=1}^{j} (\overline{x}_c)s_\ell}{k} \tag{B-9}$$

VII. COMPUTING ELEVATIONS AT FIXED DISTANCES

The procedure used for this computation is quite similar to the one used to compute distances at specific elevations. The major difference is that there is usually only one elevation at a specific distance during a given survey of a profile line. When there is a scarp defined by two elevations at a distance, the elevation with the higher subscript is used. Although used whenever it is necessary that the elevation at a specific distance be known, this procedure is mainly used in the analysis module ELVDIS to compute and display elevations and elevation changes and the maximum and minimum elevations at fixed distances along each profile line.

Beginning at the seawardmost point, each coordinate pair is tested until the fixed distance under consideration is either equal to the distance coordinate of a surveyed point or found to lie between two adjacent surveyed points. Of course, when the fixed distance is at a surveyed point, the corresponding elevation is known. If not, the equation of the line through the two adjacent points (x_i, y_i), (x_{i+1}, x_{i+1}), is solved for the elevation at the fixed distance, p:

$$y_p = y_{i+1} + \frac{(p - x_{i+1})(y_i - y_{i+1})}{(x_i - x_{i+1})} \qquad \text{(B-10)}$$

For each fixed distance a flag is set to indicate whether the associated elevation was surveyed or found through normal interpolation, whether the computation required the use of an extrapolated shoreline, or whether the fixed distance was undefined by the survey data.

VIII. DETERMINING THE MAXIMUM AND MINIMUM ELEVATIONS AT FIXED DISTANCES ALONG A PROFILE LINE

Using the procedure defined above, elevations are found at fixed distances along the profile line, compared, and the maximums and minimums saved. The profile envelope thus formed is composed of the maximums and minimums for all surveys at the profile line or, if desired, only for surveys during each year covered by the data. In the latter case, there will be an envelope for every year during which there was at least one survey at the profile line.

IX. COMPUTING UNIT VOLUME

The analysis modules in the BPAS using unit volume are BEACH and VOLCTR. The unit volume is actually a volumetric representation of an area determined by computing the area within boundaries defined by an upper and lower elevation, a landward and seaward distance, and the profile. This area is extended laterally along one unit length of the coast to give a volumetric representation of the beach at the profile line (Fig. B-4). If the lower elevation boundary is less than zero, two unit volumes are computed: one for the area below the zero elevation and one for the area above.

All unit volume computations are performed in a single subroutine. The coordinate pairs describing the profile, the upper and lower elevation boundaries, and the landward and seaward distance boundaries are passed to this subroutine. The subroutine computes the area within the given boundaries, two areas when the area below the zero elevation is required, converts area to unit volume, and returns the unit volume to the calling routine. The necessary boundaries for the area computation are determined by the calling routine.

1. Determining Boundaries

When discussing boundaries, reference is made to the previous description in Volume I (Sec. IV) of the three types of profiles which can be processed by the BPAS.

a. <u>Analysis Module VOLCTR--Total Unit Volume and Unit Volume by Contour</u>. In analysis module VOLCTR, two types of unit volume are computed: total unit volume and unit volume by contour. The total unit volume in VOLCTR is computed with as much of the survey data as possible for each survey of a profile line (Fig. B-5). There are no user-supplied or computed upper and lower elevation boundaries or landward and seaward distance boundaries. For type 1 and 2 profiles, the part of the area above the zero elevation within the following boundaries is computed.

1. Compute Area (u²)

Upper Bound

Area
Above Datum

Datum Plain

Area
Below Datum

Lower Bound

Landward Bound   *Seaward Bound*
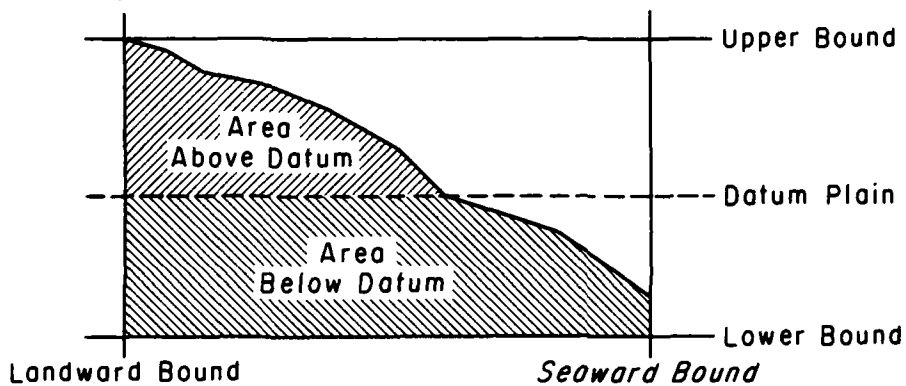
2. Extend Area Along One Unit of Beach from
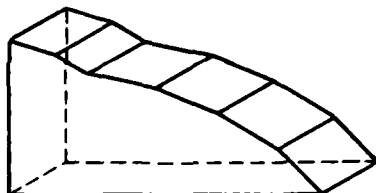
Unit Volume Above Datum (u³/u)
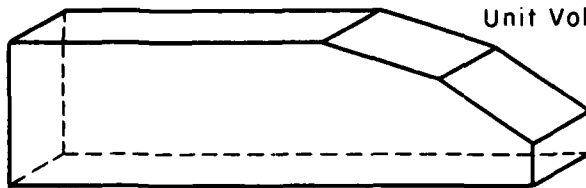
Unit Volume Below Datum (u³/u)

Figure B-4.   Determining unit volume.

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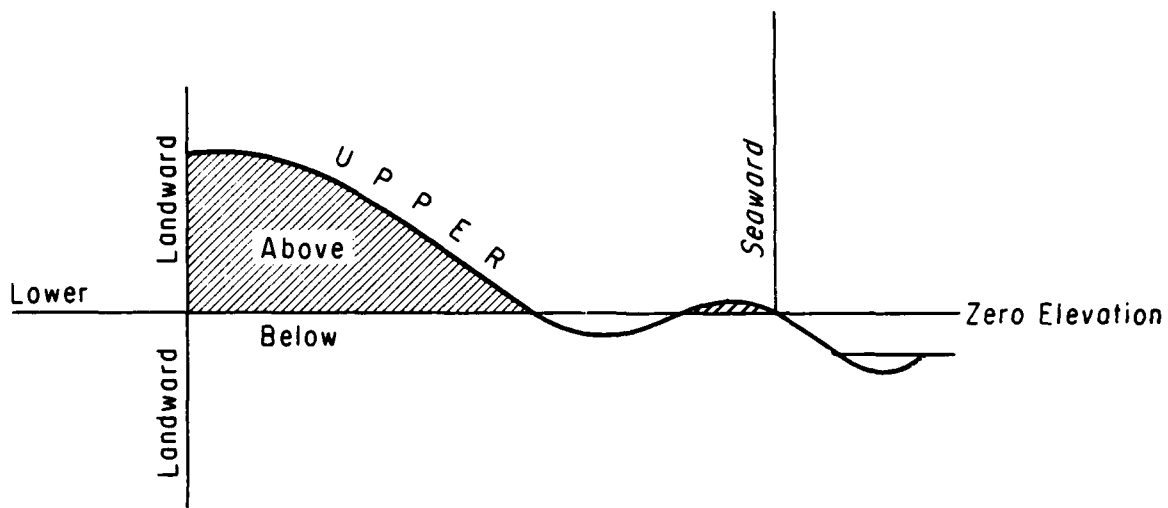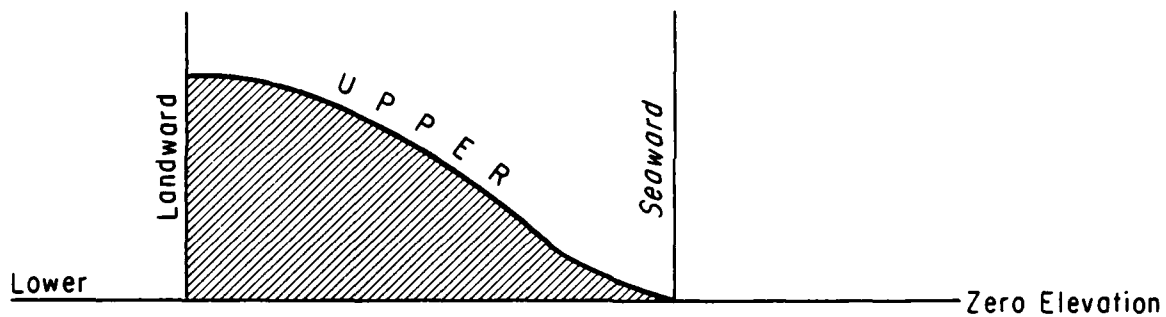
Profile Type 1

Profile Type 2
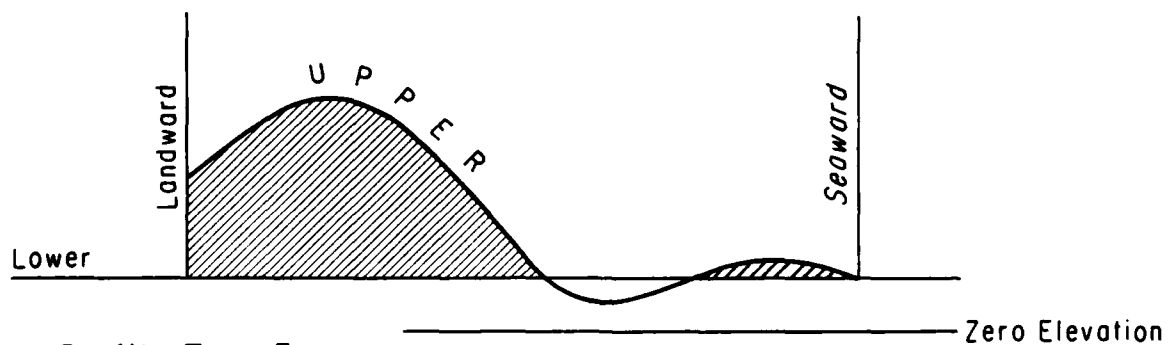
Profile Type 3

Figure B-5. Boundaries for total unit volume computations--VOLCTF.

```
Landward--landwardmost distance
Seaward---seawardmost intercept of the zero elevation
Upper-----profile surface
Lower-----zero elevation
```

For type 3 profiles, the landward and upper boundaries remain unchanged. The others are:

```
Lower-----elevation of last, not lowest surveyed point
Seaward---distance to last surveyed point
```

The purpose of the unit volume by contour computations in analysis module VOLCTR is to compare unit volume changes within specific contour intervals from one survey of a profile line to the next; the overall boundaries used are therefore determined based on common area between the two surveys. Although these comparisons are made only for the part of the profiles above the zero elevation, it is not necessary that a profile extend to the zero elevation in order to qualify for these unit volume computations. The comparison is made for all contour intervals which the consecutive surveys of the profile line have in common (Fig. B-6). The horizontal segments within which unit volume changes are compared are consistent. The contour defining the bottom of the lowest segment is zero or some user-selected minimum greater than zero and each segment is the same width, normally one unit. The overall boundaries are computed and then the unit volume within the appropriate segments is computed and the change within each segment determined by subtracting the unit volume found during the previous survey from the one for the current survey.

The upper and lower boundaries for the volume computations do not always fall directly on a contour defining the limit of one of the horizontal segments. When this happens on the upper part, there is no problem since the profile surface serves as the upper boundary for the volume computation. However, when it happens at the lower boundary, it is necessary to compute the width of a partial segment for the first comparison. Unit volumes within these partial intervals are output for TABLE10 (Vol. I, Fig. 37) and PLOT11 (Vol. 1, Fig. 39), and are not output for TABLE11 (Vol. I, Fig. 38) or PLOT12 (Vol. I, Fig. 40).

The boundaries for the overall computation, based on the data from the two surveys of the profile line to be compared, are as follows:

```
Landward--the landwardmost distance in common to both surveys of the
          profile line

Seaward---the seawardmost intercept of the lower bound

Upper-----the profile surface or a user-defined upper contour,
          whichever is lower
```

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(1) Determine common boundaries
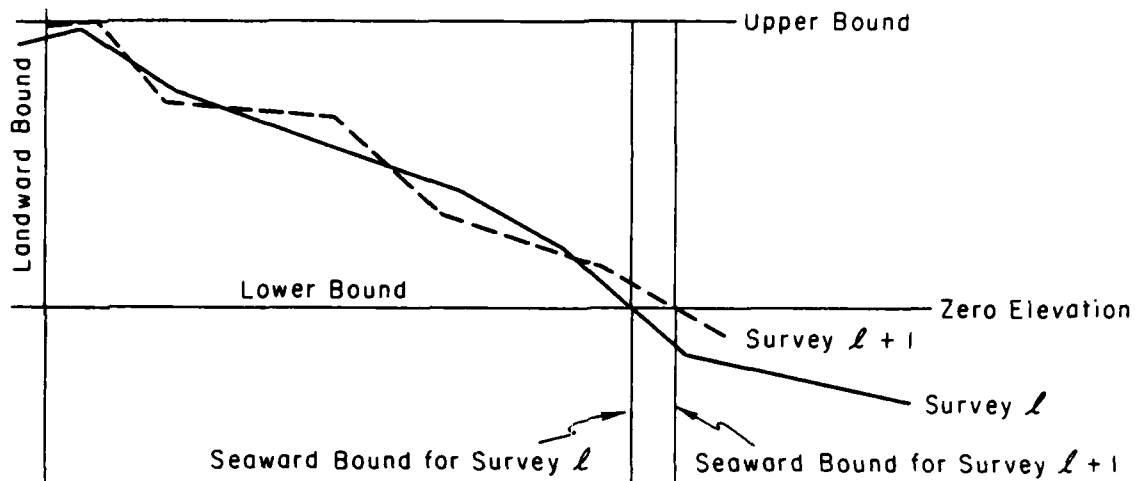
(2) Divide profiles into horizontal segments
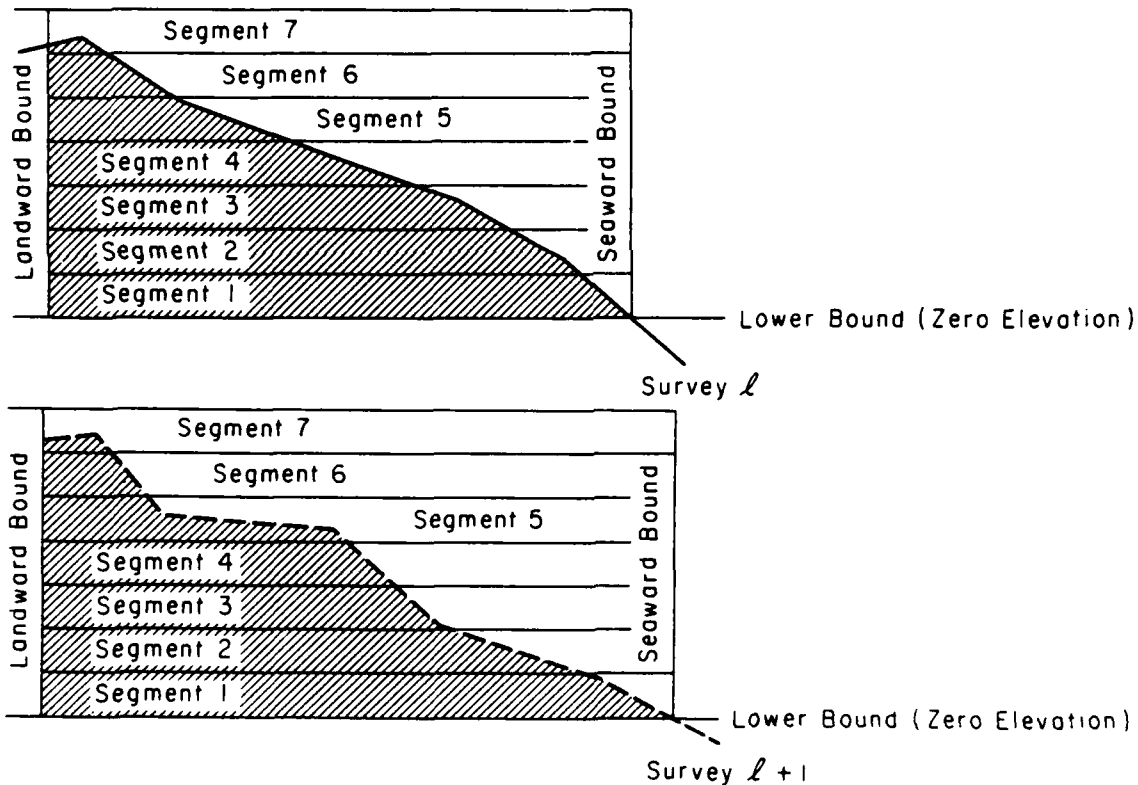
Survey ℓ

Survey $\ell + 1$

(3) Compute area for each segment. Convert to unit volume.

(4) Change in unit volume at segment 1 from survey ℓ to survey ℓ +1 at the profile line is unit volume for segment 1 during survey ℓ +1 minus unit volume for segment 1 during survey ℓ.

Figure B-6. Unit volume by contour (consecutive surveys at the same profile line).

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> Lower-----the zero elevation, a user-defined lower contour or the
> greater of the elevations at the seawardmost point of the
> two surveys, whichever of the three is highest

The boundaries for each segment which falls within the common area are passed separately to the subroutine which computes and returns the unit volume for the segment. The calling routine computes the change.

   b. **Analysis Module BEACH--Total Unit Volume Above and Below Vertical Datum.** The unit volume computations in analysis module BEACH determine changes in unit volume at the various profile lines. The boundaries for the unit volume computations are therefore determined by all surveys taken at specific profile lines. Some surveys of a profile line may be eliminated from computations when certain criteria are not met and, since there are more requirements imposed for unit volume below vertical datum computations, it is possible that for a given survey, the unit volume above the vertical datum will be computed while the unit volume below will not.

The criteria for unit volume above the vertical datum computations are as follows:

   (1) The survey must describe a type 1 or a type 2 profile (Vol. I, Sec. IV).

   (2) The distance to the landwardmost point must be less than or equal to the input horizontal datum (zero). This criteria may be changed if the user wishes to supply a minimum beginning distance. If the reference unit volume is user-supplied, the user must also supply a landward boundary for these computations; the profile must begin no farther seaward than this boundary.

The boundaries for the unit volume above vertical datum computations in analysis module BEACH are:

> Landward--if not user-supplied, the landwardmost point in common
> to all surveys of the profile line which meet the
> necessary criteria

> Seaward---seawardmost intercept of the zero elevation. It is
> probable that this will be at a different point for
> each survey of the profile line

> Upper-----the profile surface or a user-selected elevation,
> whichever is lower

> Lower-----zero elevation

The criteria for the unit volume below vertical datum computations:

   (1) The user must specify that the unit volume below vertical datum computations are to be performed.

   (2) The profile must be a type 1 profile which meets the criteria for unit volume above vertical datum computations.

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(3) The user must supply as a tolerance a distance seaward of the *output* horizontal datum. If the last surveyed point is less than this tolerance, the survey of the profile line is eliminated from further processing for unit volume below the vertical datum. When the reference unit volume below is supplied by the user, tolerance for each profile line must also be supplied.

The boundaries for the unit volume below vertical datum computations in analysis module BEACH are:

        Landward--landward boundary used for the unit volume above vertical
                datum computation

        Seaward---if not user-supplied, the seawardmost distance is common
                to all surveys of the profile line which meet the neces-
                sary criteria

        Upper-----the zero elevation

        Lower-----100 units or some user-supplied lower elevation. If an
                elevation is less than the defined lower boundary, a message
                is printed and the lower boundary is changed to the new
                minimum. This becomes the lower boundary for all unit
                volume below datum computations at the profile line being
                processed and for all profile lines to be processed. It
                does not affect previously analyzed profile lines.

For the unit volume below vertical datum computations, a vertical is dropped from the profile elevation at the seaward boundary to the elevation of the lower boundary (as shown in Fig. B-4).

2. The Computation.

As discussed earlier, subroutine VOLCTR receives survey data and boundary information, computes the area, and converts it to unit volume. When VOLCTR receives the survey data, it first examines the data to determine if there is an area to be computed below vertical datum. If there is, the area for the part below is computed and then the area for the part above is computed. When the area for the part above is being computed, the seawardmost intercept of the zero elevation becomes, for computational purposes, the seawardmost point.

After boundaries are established, the area is computed. Beginning with the seawardmost point and moving landward, each set of adjacent coordinate pairs is examined until the seaward boundary has been crossed. The computations for area begin here and continue until the landward boundary is crossed. Each segment of the profile, as defined by two adjacent coordinate pairs, is considered and the area beneath each segment which falls within the defined boundaries is computed and accumulated. The total area is then multiplied by the supplied conversion factor to yield unit volume and the result returned to the calling routine. Figure B-7 provides a schematic of the procedure and, because the number of possible paths prohibits a simpler representation of the computation, the logic of the subroutine is provided as follows.
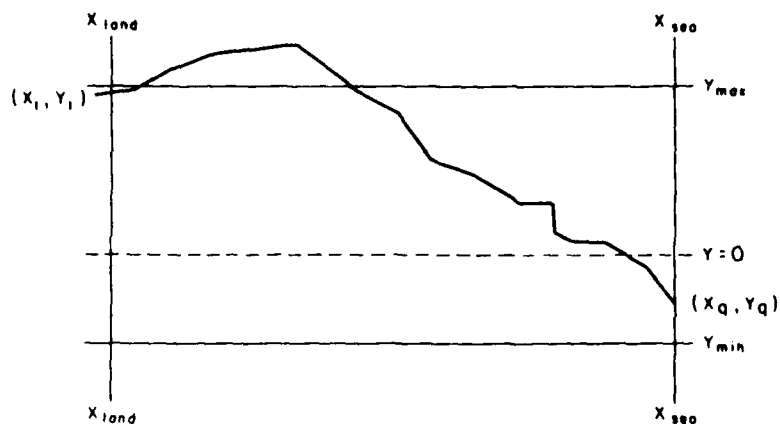
1 Profile Broken Into Two Parts
(a) Part Above Vertical Datum
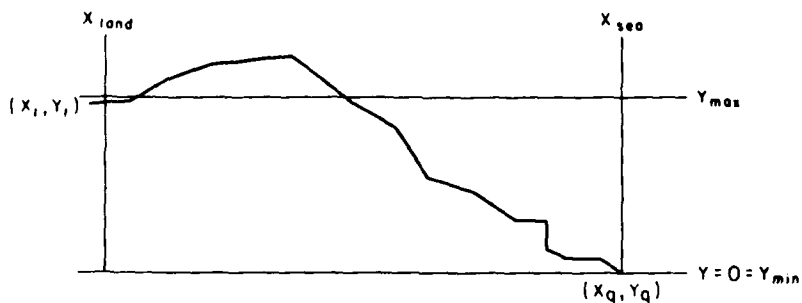
(b) Part Below Vertical Datum
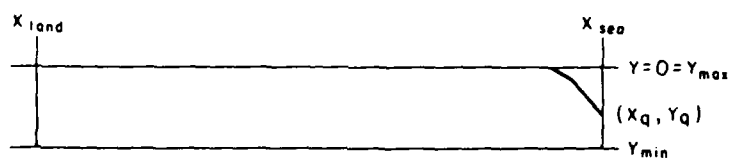
2 Compute Area for Part Below Vertical Datum
Sum of Partial Areas A1, A2, A3, = Segment
Area A_i. Sum of A_i = Area Below, A_b

$A_b = A_{16} + A_{14} + A_{13} + A_{12} + A_{11} + A_9 + A_8 + A_5 + A_3 + A_1$
$A_{15} + A_{10} + A_7 + A_4 + A_2 +$

$(A_6 = \emptyset)$

Figure B-7. Survey data and boundary information received
by VOLCTR.

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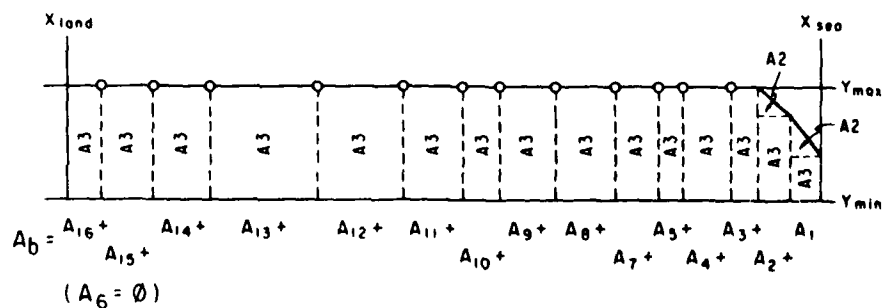
3 Compute Area for Part Above Vertical Datum

$$A_0 = A_{14} + A_{13} + A_{12} + A_{11} + A_{10} + A_9 + A_8 + A_7 + A_6 + A_3 + A_5 + A_2 + A_1$$

$$(A_4 = \emptyset)$$
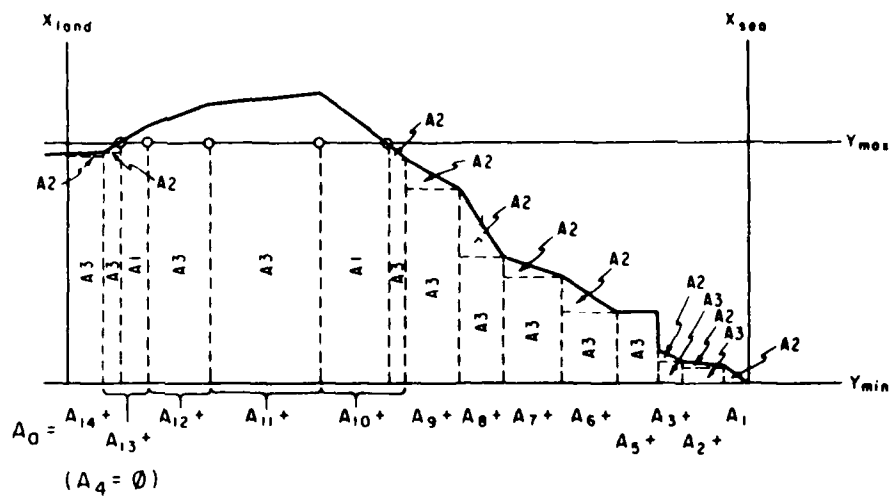
4 Convert Areas to Unit Volumes

Unit Volume Above Datum

$$V_o = A_o \times C$$

Unit Volume Below Datum
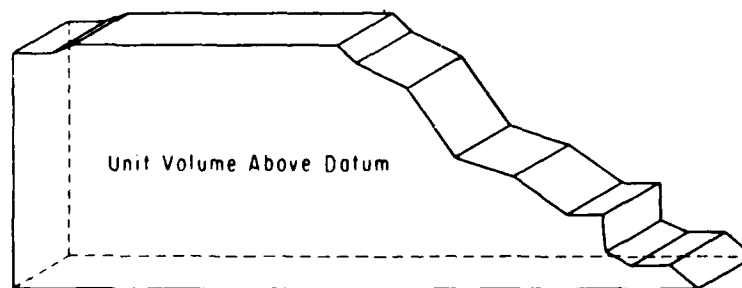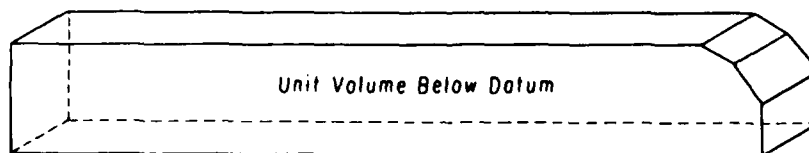
$$V_b = A_b \times C$$

Figure B-7. Survey data and boundary information received by VOLCTR.

The part of the total area represented by each line segment, from coordinate (x_i, y_i) to (x_{i+1}, y_{i+1}), is called A_i. Each A_i is broken down as necessary so that it is composed of rectangles and triangles; up to three components may be required to thus represent a given A_i (Fig. B-8). These pieces will be called A1, A2, and A3 and will be reset to zero before each A_i is computed. For simplicity, also let (X1, Y1) represent (x_i, y_i) and (X2, Y2) represent (x_{i+1}, y_{i+1}). These also will be appropriately reset before the computation of the successive A_i's. The boundaries are represented as follows.

> YMAX---the upper elevation boundary
> YMIN---the lower elevation boundary
> XSEA---the seaward distance boundary
> XLAND--the landward distance boundary

Because of the control in the calling routine, there will never be a case where the seawardmost point is landward of the seaward boundary or that the landwardmost point is seaward of the landward boundary. The changing of the values of (X1, Y1) and (X2, Y2) does not affect the values of (x_i, y_i), (x_{i+1}, y_{i+1}).

Beginning at the seawardmost point, each consecutive set of coordinate pairs is tested until all the following conditions are met:

    (a)   X1 < XSEA

    (b)   Y1 > YMIN or Y2 > YMIN

    (c)   X1 $\neq$ X2

Condition (a) indicates the area computations may begin while conditions (b) and (c) assure that $A_i \neq 0$.

Determine if any boundaries are crossed and make appropriate adjustment if so.

If   X1 < XLAND

   then   X1 = XLAND
              Use equation (B-10) to find the elevation at XLAND.
              Let this be Y1.

If   X2 > XSEA

   then   X2 = XSEA
              Use equation (B-10) to find the elevation at XSEA.
              Let this be Y2.

If   Y1 < YMIN

   Then   Y1 = YMIN
              Use equation (B-2) to find the distance to YMIN.
              Let this be X1.
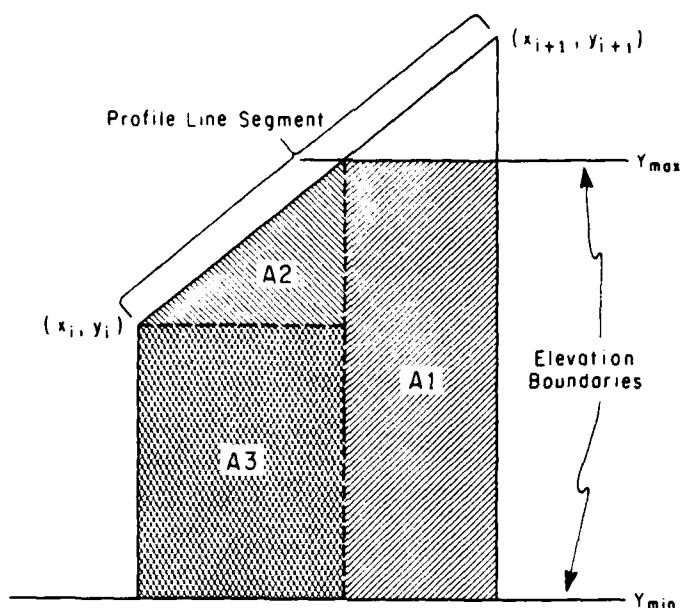
Figure B-8. Component parts for area computations.

If $Y2 < YMIN$

    then $Y2 = YMIN$
Use equation (B-2) to find the distance to YMIN.
Let this be X2.

If $Y1 < YMAX$ *and* $Y2 > YMAX$

    then $Y2 = YMAX$
Use equation (B-2) to find the distance to YMAX.
Let this be X3.
$A1 = (X2 - X3) (Y2 - YMIN)$
Let $X2 = X3$.

If $Y1 > YMAX$ *and* $Y2 < YMAX$

    then $Y1 = YMAX$
Use equation (B-2) to find the distance to YMAX.
Let this be X3.
$A1 = (X3 - X1) (Y2 - YMIN)$

If $Y1 > YMAX$

    then $Y1 = YMAX$

If $Y2 > YMAX$

    then $Y2 = YMAX$

Compute the area under the line segment and within the pertinent boundaries:

         $Y3$ = the greater of $Y1$ and $Y2$

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Y4 = the lesser of Y1 and Y2

A2 = (X2 – X1) (Y3 – Y4)/2

A3 = (X2 – X1) (Y4 – YMIN)

A = A1 + A2 + A3 (Fig. B-13)

The next two coordinate pairs are considered and the next A_i computed until X2 ≤ XLAND. The required area has then been computed.

Letting

q   be the number of coordinate pairs, and

A_i be zero for all line segments where X_i ≥ XSEA and x_{i+1} ≤ XLAND.

The area of the profile within the provided boundaries:

$$A = \sum_{i=1}^{q-1} A_i \qquad\qquad (B-11)$$

Letting

C be the appropriate factor to convert squared output units to cubed units. The unit volume of the profile within the provided boundaries:

$$V = AC \qquad\qquad (B-12)$$

X. COMPUTING THE MEAN UNIT VOLUME

In the analysis module BEACH, the mean unit volume is computed for the surveys taken at each profile line. If it has been requested that the unit volume below vertical datum computation be performed, there is a mean computed for the unit volume below the zero elevation as well as for the part above. Otherwise, the mean unit volume is only for that part of the profile line above the zero elevation. The mean is a simple mean computed by adding the appropriate unit volume during each survey of the profile line and dividing by the number of surveys for which the unit volume could be computed. As discussed earlier on boundary determination, conditions required for allowing a computation of unit volume below vertical datum are more stringent than those required for unit volume above. It is thus possible that the denominator in the computation of the means vary. Using the appropriate number of surveys for k and the unit volume rather than the distance x_c, the computation for mean unit volume is represented by equation (B-4).

XI. COMPUTING STATISTICAL TRENDS AND CORRELATIONS

Some basic statistical analysis is performed in the analysis modules BEACH, SURVY2, and VOLCTR.

1. Correlation Coefficients.

In analysis module SURVY2, the correlation coefficient for change in shoreline position from the reference position (dependent, Y) versus elapsed time (independent, X) is computed, if requested, for all surveys at each profile line.

In analysis module BEACH, the following correlation coefficients are computed for surveys at each profile line, if requested:

(a) Change in unit volume above the vertical datum (dependent, Y) versus change in distance to shoreline (independent, X) between consecutive surveys.

(b) Change in unit volume above the vertical datum (dependent, Y) versus change in distance to shoreline (independent, X) from the selected reference volume or position.

(c) Change in unit volume above the vertical datum (dependent, Y) versus change in unit volume below the vertical datum (independent, X) between consecutive surveys.

(d) Change in unit volume above vertical datum (dependent, Y) versus change in unit volume below the vertical datum (independent, X) from the selected reference volumes.

Letting

k be the number of surveys at the profile line for which both X and Y can be computed, the correlation coefficient (Crow, Davis, and Maxfield, 1960[4]) is

$$\mu = \frac{k\Sigma XY - \Sigma X\Sigma Y}{\sqrt{[k\Sigma X^2 - (\Sigma X)^2][k\Sigma Y^2 - (\Sigma Y)^2]}} \qquad (B-13)$$

2. Regression Line--Least Squares Fit.

The regression coefficient and the regression line are computed for the following:

(a) Change in distance to shoreline position from the selected reference position (dependent, Y) versus elapsed time (independent, X). This computation is performed in the analysis modules SURVY2 and BEACH.

(b) Change in unit volume above datum from the selected reference volume (dependent, Y) versus elapsed time (independent, X). This computation is performed in analysis module BEACH only.

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[4]CROW, E.L., DAVIS, F.A., and MAXFIELD, M.W., *Statistics Manual*, Dover Publications, New York, 1960, pp. 152 and 158.

(c) Change in unit volume below datum from the selected reference volume (dependent, Y) versus elapsed time (independent, X). This computation is performed in analysis module BEACH only.

Letting

k be the number of surveys of the profile line for which both X and Y could be computed, the regression coefficient, slope of the regression line (Crow, Davis, and Maxfield, 1960[5]), is

$$\beta = \frac{k\Sigma XY - \Sigma X \Sigma Y}{k\Sigma X^2 - (\Sigma X)^2} \qquad (B-14)$$

and the intercept (Crow, Davis, and Maxfield, 1960[6]) is

$$\alpha = \frac{\Sigma Y - \beta \Sigma X}{k} \qquad (B-15)$$

3. Standard Deviation.

In analysis module VOLCTR, the standard deviation for unit volume changes within specific contour segments is computed. This computation is used to examine changes between consecutive surveys of profile lines at a locality as shown on TABLE11 (Vol. I, Fig. 38) outputs. For profile lines surveyed during both surveys being considered, the standard deviation is computed for the following:

(a) Unit volume within each contour segment at all the profile lines.

(b) Total positive change in unit volume at all profile lines. (Sum of the positive changes in unit volume within the contour segments at each profile line is the total positive change at that profile line.)

(c) Total negative change in unit volume at all profile lines. (Sum of the negative changes in unit volume within the contour segments at each profile line is the total negative change at that profile line.)

(d) Total change in unit volume at all profile lines. (Sum of total positive and negative changes at each profile line is the total change at that profile line.)

Letting

m   be a consecutive integer identifying each profile line,

n   be the number of profile lines at which X_m can be computed,

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[5]Crow, Davis, and Maxfield, op. cit., p. 33.

[6]Crow, Davis, and Maxfield, op. cit., p. 33.

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X_m be the appropriate unit volume change at profile lines, and

be zero for profile lines at which X_m cannot be computed.

The standard deviation

$$\sigma = \sqrt{\dfrac{n \sum\limits_{m=1}^{n} X_m^2 - \left(\sum\limits_{m=1}^{n} X_m \right)^2}{n(n-1)}} \qquad \text{(B-16)}$$

XII. ELAPSED TIME

Elapsed time, used for both computational and display purposes (Vol. I, Fig. 14), is computed in analysis modules SURVY2, PEACH, and ELVDIS. It may be expressed as hours, days, months, or years at the user's option, but once the type of time has been selected, all computations and displays for a particular run must be expressed in terms of that time. No provision is made for a change in century; it is assumed all data are collected in the 20th century.

1. Hours, Days, or Years.

When elapsed time is expressed as hours, days, or years, the same representation is used both for computational and display purposes. The earlier time in the range of dates covered by the data is the zero time. The number of hours passed since 0000 hours on 1 January 1900 to the zero time is computed. Next, the number of hours passed since 0000 hours on 1 January 1900 to the time of the survey is computed and the hours to zero time subtracted from this. These hours become the elapsed time or the hours are optionally converted to days or years if required.

The procedure is as follows:

(a) A 12-element array containing number of hours passed in a year (excluding leap year) prior to the beginning of each month in the year is established:

$H_1 =$ 0	$H_4 =$ 2,160	$H_7 =$ 4,344	$H_{10} =$ 6,552
$H_2 =$ 744	$H_5 =$ 2,880	$H_8 =$ 5,088	$H_{11} =$ 7,296
$H_3 =$ 1,416	$H_6 =$ 3.624	$H_9 =$ 5,832	$H_{12} =$ 8,016

(b) If the year under consideration is a leap year (if there is no remainder when the year is divided by 4), 24 hours are added to each H element from H_3 on, inclusive.

(c) Unless the year under consideration is 1900, the number of leap years which have preceded the one under consideration is computed by subtracting 1 from the year and dividing by 4. The integer part of the quotient plus 1 is the number of preceding leap years. If the year is 1900, the number of preceding leap years is zero.

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(d) Convert number of days from preceding leap years to hours by multiplying by 24.

(e) Find total hours elapsed by multiplying the year by 8,760 and adding number of preceding leap hours. Add the H element corresponding to the month of the survey. Subtract 1 from the day of the survey and multiply by 24. Add the hour of the survey. Divide the minutes by 60 and add. Call this T_o if the zero time is being computed and H_{tot} if the hours elapsed to a particular survey are being computed.

Elapsed time in hours is $H_{tot} - T_o$
Elapsed time in days is $(H_{tot} - T_o)/24$
Elapsed time in years is $(H_{tot} - T_o)/8,760$

2. Months.

Elapsed months is expressed, for display purposes, as the months passed since the beginning of each year. For the graphical display of this data, there is a different plot drawn for each year and on each plot the zero time is 1 January at 0000 of that year (Vol. I, Fig. 14). The number of months passed during the year is computed by subtracting 1 from the month of the survey, dividing the day of the survey by 30.5 and adding the two results. When the day of the survey exceeds 30 it is set to 30.5 for the computation.

For computational purposes, months elapsed is expressed as the number of months elapsed since the zero time:

(a) Compute months elapsed during the current year as above.

(b) Compute months elapsed before the current year by subtracting the year of the zero time from the year of the survey and multiplying by 12.

(c) Add the results of (a) and (b) to obtain total elapsed months.

APPENDIX C

BPAS ERROR MESSAGES

The errors in the BPAS are in two categories--those which are informative and those which are fatal. Each error has been assigned a unique number which is printed along with the error messages.

The informative messages, identified by an "I," do not always flag a real error and have been included to alert the user that the program has encountered an unusual or potentially serious situation.

The fatal errors, identified with an "F," cause the programs to stop execution after they are printed. These errors occur when further execution is impossible or it is probable that further execution will not produce usable results.

Table C-1, which is a sequential list of the BPAS error messages by number, contains the error message which is printed, the category of the error, and the action that should be taken. The remarks column contains further information, such as the most common sources of the problem and steps which may help circumvent the problem. Some errors can be eliminated only with a program modification; however, a discussion describing how to implement such modifications is beyond the scope of this report.

Table C-1. Listing of BPAS error messages.

Error No.	Description	Severity[1]	Action	Remarks
1	No edit options were specified, check the option card to make sure there is a 1 in positions 1, 2, or 3.	F	Complete edit option card.	EDIT1 edit option card. None or more than one of the three types of edits have been selected.
2	The unit number of survey data file was entered as --, check appropriate users guide for correct unit numbers.	F	Correct and retry.	EDIT1 edit option card. Must enter a 5 (cards), 9 (disc), or 8 (disc needs sorting)
3	Input data missing -19999999 card at end of data. Processing continues for this locality only.	I	None required.	Survey input data file missing -99999999. This error will also be written if the wrong unit for survey input data was specified on the edit option card.
4	For locality -- at line -- at survey --the sheet number was expected to be 1 but it was --.	I	Correct and retry before running EDIT2.	Survey input data file has records out of order or missing.
5	Dimensions of distance-elevation arrays exceeded, only 150 pairs allowed	F	See analyst.	Survey input data file. If more than 150 coordinates must be processed, a program modification will be required.
6	End of file on input while attempting to read continuation card.	F	Correct and retry.	Survey input data file. Last survey read missing a card.
7	Invalid continuation card, see unmatching fields below.	I	Correct and retry before running EDIT2.	Survey input data file is missing, a card or cards are out of order or mispunched.
8	Survey -- of profile -- is improperly formatted and has been eliminated from processing.	I	Correct and retry before running EDIT2.	Survey input data file. Imbedded blanks in data pairs.
9	Error type -- has exceeded prescribed matching tolerance supplied.	F	Correct and retry.	Problem may be alleviated by changing the user-supplied tolerance for the offending error type on the edit-option card.

[1] F - Fatal, the condition causes program execution to stop;
I - the message is printed for informative purposes only.

Table C-1. Listing of BPAS error messages.—Continued

Error No.	Description	Severity	Action	Remarks
10	The number of sets of profile or survey numbers for extraction exceeds 50.	F	Correct and retry.	Attempt to extract more than 50 individual or ranges of profiles or surveys. Problem may be alleviated by increasing the number of profiles or surveys defined in single range.
11	Distance-elevation adjustments requested but number of adjustment cards is zero.	F	Correct and retry.	Position 12 of the processing-option card has a 1 indicating that adjustments are to be made but positions 78-80, telling the number of adjustment cards to read, are blank or zero.
12	Dimension for number of adjustments exceeded. Only 100 sets allowed and -- requested.	F	Correct and retry.	Problem may be alleviated by extracting data sets, making adjustments and recombining.
13	Datum code of -- for survey -- of line -- is invalid.	F	Correct and retry.	Survey input datum has datum code not in look-up table (0-9, A or D) or in wrong column.
14	Datum changed from -- to -- on survey -- of line --.	I	None required.	
15	Locality changed from -- to -- on survey -- of line --.	I	Correct and retry.	Data from only one locality should be processed through the EDIT2 program in a single run.
16	Survey -- of line -- has two initial cards, first one invalid.	I	Correct and retry.	Survey input data out of order.
17	Expected card -- but read card -- for survey -- of line --.	I	Correct and retry.	Survey input data card out of order or missing.
18	Survey -- of line -- has unequal number of data elements.	I	Correct and retry.	Missing distance or elevation value or leftmost position of value does not have + or -.
19	Distance values -- and -- for survey -- of line -- not in ascending order.	I	Correct and retry.	Survey input data must be corrected before further processing.

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Table C-1. Listing of BMAC error messages.--Continued

Error No.	Description	Severity	Action	Remarks
20	Dimensions exceeded for number of surveys of a line, only 150 allowed.	F	See analyst.	Data may have to be broken into smaller sets for processing or program modified.
21	Attempt to process more than 59 years of data.	F	See analyst.	Range of years cannot exceed 59.
22	Profile numbers requested for extraction are not in ascending order.	F	Correct and retry.	Extraction-definition cards must be corrected.
23	Performing -- extraction and reading a -- option card.	F	Correct and retry.	Extraction-definition cards out of order or number of extraction incorrect on processing-option card.
24	Extraction type (range or indiv) not specified.	F	Correct and retry.	Processing-option card indicates an extraction is to be performed but does not identify proper type.
25	Problem with 1st requested profile number for ext. action.	F	See analyst.	Extraction-definition cards or survey input data may be suspect.
26	No output records on extraction file.	F	Check extraction card setup.	Extraction-definition cards may have specified extraction of nonexistent data.
27	Card input for reformatting missing -1 in positions 1-2 as last card.	I	None required.	If survey input data cards are processed with the EDIT2 card image data, the "-1" card is required for data separation.
28	Expecting to read adjustment card and read -- card. Check input and number of adjustment cards specified.	F	Correct and retry.	Adjustment-definition cards may have been improperly set up or the number specified on the EDIT2 processing option card inaccurate.
29	Adjustment card -- is missing data for profiles.	F	Correct and retry.	Adjustment by profile number was specified but no profile line numbers were defined.
30	Adjustment card -- missing data for surveys.	F	Correct and retry.	An adjustment by survey number was specified but no survey numbers were defined.

Table ?-. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
31	No corrections specified on adjustment card --.	F	Correct and retry.	EDIT2 adjustment-definition card improperly formatted.
32	Profile or survey numbers entered incorrectly on adjustment card --.	F	Correct and retry.	Survey or profile line numbers for correction left blank or entered in wrong positions of EDIT2 adjustment-definition card.
33	Profile numbers in descending order going from adjustment card -- to --.	F	Correct and retry.	Profile numbers must be entered in ascending order on adjustment cards. Adjustment-definition cards may be out of order.
34	One distance-elevation adjustment requested for all data but more than one adjustment card specified.	F	Correct and retry.	EDIT2 adjustment-definition cards and processing-option card do not agree.
35	Profile -- has more than one reference survey.	F	Eliminate duplicate reference survey number.	Surveys may have been duplicated or misnumbered.
36	Only one survey, type 3 plots cannot be done.	F	Add surveys to data file.	Survey data may be missing or improperly sorted.
37	No surveys of line -- either have a datum intercept or qualify for volume above computations.	F	See analyst.	System problem. Program should not reach this point.
38	No zero unit volume specified for unit volume --. Line -- is eliminated from processing.	I	None required.	Zero volumes defined on OPT CRDS 5 and 6. Check supplementary OPT CRDS 5A or 6A for missing line.
39	No landward bound supplied for line --, no output for this line.	I	None required.	Landward boundary defined on OPT CRD 5. Check supplementary OPT CRDS 5A and 5B for missing line.
40	No seaward bound supplied for line --, no output for this line.	I	None required.	Seaward boundary defined on OPT CRD 6. Check supplementary OPT CRDS 6A and 6B.

Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
41	Reference survey for line -- does not qualify for volume above computations. No output for this line.	I	None required.	Check landward boundaries if user-supplied or tolerance for first surveyed point in positions 70-80 of OPT CRD 5. May wish to allow extrapolation or check survey in question for complete data.
42	Reference survey for line -- does not qualify for volume below computations. No volume below output for this line.	I	None required.	Survey data. May wish to ensure answer: boundaries in ... or supplementary ...
43	Minimum contour for survey -- of line -- is less than specified minimum. Lower bound changed to --.	I	None required.	May check survey in question to assure accuracy of survey data.
44	No surveys of line -- had a datum intercept. No output for this line.	I	None required.	May wish to allow extrapolation or adjust vertical coordinates. Shoreline is always at zero elevation.
45	No surveys of line -- qualify for volume above computations. No output for this line.	I	None required.	See comments for error 41.
46	No surveys of line -- qualify for volume below computations.	I	None required.	See comments for error 42.
47	End of file on internal transfer unit.	F	See analyst.	System problem. Program should not reach this point.
48	Surveys -- -- of line -- tried to start volume by contour below datum.	F	See analyst.	System problem. Program should not reach this point.
49	Surveys -- -- of line -- cannot be compared. No points in common.	I	None required.	May wish to change upper or lower boundaries on volume card.
50	Expected another -- card.	F	Correct and retry.	CONTOUR or DISELEV cards missing or out of order.
51	-- is too many or too few contours or distances. Check -- card.	F	Correct and retry.	CONTOUR or DISELEV cards have wrong number of contours or distances defined or entered.

Table C-1. Listing of BPAS error messages.—Continued

Error No.	Description	Severity	Action	Remarks
52	First -- card read was card no. -- it must be 1.	F	Correct and retry.	CONTOUR or DISELEV cards missing or out of order.
53	Contour -- has more than 10 multiple intercepts for survey -- of line --. Only 10 will be on output.	I	None required.	Profile crosses contour more than 11 times.
54	Lower bound for volume below -- must be less than zero.	F	Correct and retry.	VOLUME card must be corrected.
55	No horizontal adjustment supplied. Profile line -- is eliminated from processing.	I	None required.	Output horizontal datum defined on. OPT CRD 4 or SUP 4A cards. Number of lines may be incorrect or adjustments missing.
56	No datum intercept on reference survey. Profile line -- is eliminated from processing.	I	None required.	May wish to allow extrapolation or adjust data to another datum.
57	Survey -- of line -- has no reference and will not be output.	I	None required.	May wish to allow extrapolation or adjust data to another datum.
58[2]	Survey number (___) not between minimum (___) and maximum (___) defined on header record.	F	Correct and retry.	Survey number incorrect in survey data or header record.
59[2]	Dimension for number of coord pairs exceeded. Number of pairs requested is --.	F	See analyst (must allow for larger dimensions).	Survey number may be incorrect in survey data or header record.
60[2]	Survey -- of line -- has no zero intercept.	F	Correct and retry.	Check minimum elevation on bad survey.
61[2]	Survey -- of line -- has a bench mark at or seaward of shoreline.	I	None required.	May have an incorrect minimum elevation for survey or specified more coordinate pairs than there are in the survey record.

[2]These errors suggest processing through analysis routines of data which have not been created directly from the EDIT2 program.

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Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
62	File mark expected on unit -- after header record but not found.	F	See analyst.	Data read in magnetic media format must be separated from header with a file mark.
63	Dimension for number of profile lines exceeded. Number of lines requested is --.	F	Reduce data set.	May wish to break data into smaller sets or increase program dimensions.
64	Dimension for number of surveys of a profile exceeded. Number of surveys requested is --.	F	Reduce number of surveys in data set.	See error 63.
65	For profile -- on survey -- specified starting distance is greater than all the survey distances.	F	Correct and retry.	Check ENVLOP card. Be sure distance entered has same horizontal datum and is in same units as expected outputs.
66	For profile -- on survey -- no more maximum and minimum will be considered.	I	Increase increment on ENVLOP card.	Profile so long that more than 2,000 points for maximum and minimum found.
67	Total of distances used to weight spatial mean is --.	F	Correct and retry.	DISTNCE cards may be blank or contain negative distances.
68	Requested -- profile numbers on DISTNCE card, only -- specified on header card.	F	Correct and retry.	Be sure number of profile lines entered on DISTNCE cards is right-justified.
69	-- card encountered. DISTNCE card expected.	F	Correct and retry.	DISTNCE card missing or out of order or incorrect number of DISTNCE values.
70	DISTNCE card number -- expected but number -- read.	F	Correct and retry.	DISTNCE card probably out of order.
71	Profile -- was not surveyed on reference. There will be no output for this line.	I	None required.	Reference survey number may not have been properly entered on OPT CRD 4, 5, or 6.
72	No consecutive surveys of line -- had a datum intercept. No output for this line.	I	None required.	See comments for error 44.

Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
73	There is no mean shoreline position (reference) for profile--. No output for this line.	I	None required.	See comments for error 44.
74	No data for PLOT5.	I	None required.	PLOT5 output requested but there are no data to plot.
75²	Survey -- of line -- has too many intercepts. Duplicate survey or lines on input.	F	Correct and retry.	Check survey data. May have duplicate survey numbers or profile line numbers.
76	Invalid code in column -- for following option card.	F	Correct and retry.	Check to be sure option card numbers are entered in correct columns.
77	Line numbers for entry -- do not match on SUP 5A and 5B option cards, zero volumes and landward bounds.	F	Correct and retry.	Profile line numbers entered on SUP 5A and 5B cards must match.
78	Line numbers for entry -- do not match on SUP 6A and 6B option cards, zero volumes and seaward bounds.	F	Correct and retry.	See error 77.
79	Zero linear or cubic conversion factor.	F	Correct and retry.	OPT CRD 8 has been improperly completed.
79.5	Bad reference survey number on following option card. Survey number must be between ____ and ____.	F	Correct and retry.	On OPT CRD 4, 5, or 6, the reference survey is outside the range of valid survey numbers defined on the header record.
80	Plot type -- suppressed, specs are in years and time is expressed in months.	I	None required unless the indicated plot output is desired.	Kind of time selected does not agree with X-minimum. Year must be expressed as 19--.

---

²These errors suggest processing through analysis routines of data which have not been created directly from the EDIT2 program.

Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
81	Invalid input card.	F	Correct and retry.	Specifications or option card improperly completed or blank card has not been entered at the end of option and specification cards.
82	Number of profile lines specified on OPT CRD 4, 5, or 6 exceeds dimensions.	F	Correct and retry.	Be sure number of profiles is entered right-justified.
83	--years of data exceed dimensions. Maximum allowed is 50.	F	Reduce data set.	May wish to modify program to accept more years.
84	Following input card ignored – not used by --.	I	None required.	
85	--- is not valid program.	F	Correct and retry.	Check program identification card. Name of analysis module must appear on this card, be properly spelled and left-justified: SURVY1, SURVY2, BEACH, VOLCTR, ELVDIS are only valid entries.
86	Length of axis on plot type -- exceeds 10 inches. Could cause problems if plotted on pen plotter.	I	None required.	May wish to reduce length of vertical axis or factor the plot.
87	Zero offset was specified on plot type ---, interpretation of lines may be difficult.	I	None required.	PLOT3 or PLOT5 specified but no offset supplied.
88	There is no plot -- for program ---.	I	None required.	
89	Default plot specs have been requested but output units are not feet. Specs must be supplied.	F	Correct and retry.	Specification card for plot output must be completed if data are not to be output in feet.
90	Maximum lines per plot is 10. --- entered for plot type ---.	F	Correct and retry.	May wish to modify program to allow for more than 10 lines per plot.
91	Factor (position 69) must be 1 or 0. -- entered for plot type ---.	F	Correct and retry.	PLOT spec card improperly completed.

Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
92	For plot type --- X or Y increment equals zero.	F	Correct and retry.	PLOT spec card improperly completed.
93	No program has plot --- for output.	F	Correct and retry.	PLOT spec card improperly completed.
94	There is no time axis --- for plot type ---.	F	Correct and retry.	Valid time codes are Y, M, D, or H.
95	No --- selected for plot type ---.	F	Correct and retry.	No contours or distances selected for output but plot output requested.
96	Request for number of lines plot for plot type --- exceeds plot device capacity of 36 inches for vertical axis. Plot will have to be factored.	F	Reduce number, length, increment, or factor plot.	Check PLOT spec card. If plotting device will handle a greater than 36-inch axis, may wish to modify program.
97	No zero contour was specified for shoreline position for plot type ---.	F	Correct and retry.	Check CONTOUR and PLOT card. Must specify zero contour when shoreline only plots are requested.
98	Number of lines specified on OPT CRD --- exceeds dimensions.	F	Correct and retry.	Be sure profile line numbers are right-justified on supplementary option cards.
99	Option card bad or out of order --- supplementary option expected.	F	Correct and retry.	May have forgotten to include supplementary option cards or did not put them immediately behind option card.
100	Table --- is not output of program ---.	I	None required.	
101	No program has table --- for output.	F	Correct and retry.	TABLE spec card improperly completed.
102	Regression analysis for shoreline position requested but no proper time defined on TABLE2 card.	F	Correct and retry.	TABLE spec card. Time must be M, H, D, Y, or blank.
103	TABLE8A requested but no proper time defined for statistical correlations. TABLE8A suppressed.	I	Correct and retry if TABLE8A output is desired.	TABLE8 card. Time must be M, H, D, Y, or blank.

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Table C-1. Listing of BPAS error messages.--Continued

Error No.	Description	Severity	Action	Remarks
104	There is no reference for profile ---. No TABLE4 output.	I	None required.	See comments for error 56.
105	TABLE3 and TABLE4 are meaningless when horizontal datum is shoreline on previous survey.	I	See analyst.	System problem.
106	There is no data for defined reference. No TABLE7 output.	I	None required.	See comments for error 56.
107	TABLE6 and TABLE7 are meaningless when horizontal datum is shoreline on previous survey.	I	See analyst.	System problem.
108	Exceeded dimensions for number of contours.	F	Correct and retry.	Check for unreasonable elevation range in survey input data. VOLCTR allows up to 100 contour intervals. VOLUME specification card may be used to increase interval or decrease boundaries for volume computations.
109	Illegal reference for zero unit volume above.	F	See analyst.	System problem.
110	Dimension for volume change array exceeded.	F	Correct and retry.	Error has same source as 108.
111	No outputs selected.	F	Correct and retry.	PLOT and TABLE spec cards have not been supplied.
112	Lower bound for volume computations--, must be less than upper bound.--,	F	Correct and retry.	VOLUME card improperly completed.
113	Contour interval for volume computations, --, must be greater than zero.	F	Correct and retry.	VOLUME card improperly completed.

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APPENDIX D

DATA REQUIREMENTS

1. Basic Assumptions.

The data for which the BPAS was designed consist of beach profile data and the computations performed deal mainly with changes in shoreline and other contour positions and unit volumes. Figure D-1 is a schematic of a typical beach profile survey. The following restrictions are placed on the data which can be processed by the system:

    (a) Distances to each successive surveyed point must be greater than or equal to the distance to the previous one.

    (b) Each survey must begin landward of the shoreline position and proceed seaward.

    (c) There must be at least one point with an elevation greater than zero.

Based on these restrictions there are three types of profiles which can be analyzed by the system (see Vol. I, Sec. IV):

    (a) Type 1: The profile extends from a point landward to a point seaward of the shoreline.

    (b) Type 2: The profile extends only to the shoreline or the shoreline position can be extrapolated.

    (c) Type 3: The profile does not extend to the shoreline and the shoreline position cannot be extrapolated.
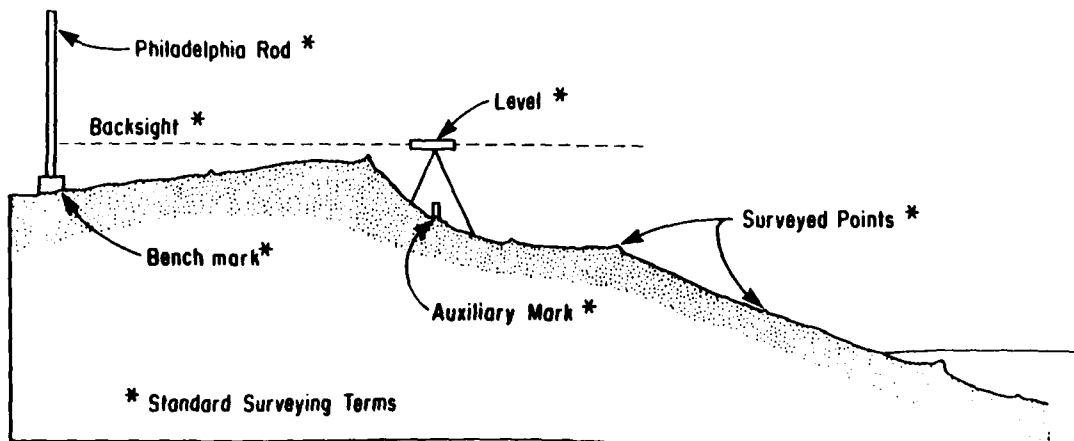
Figure D-1. Schematic of a typical profile survey.

2. Program Limitations.

Because of array dimension sizes and other computational procedures, the following additional restrictions are placed on the data:

(a) There must be at least two but no more than 60 surveyed points defining a profile.

(b) Profile line and survey numbers must be numeric. The difference between the largest and smallest profile number must not exceed 99; between the survey numbers, no more than 149. Profile line numbers must fall between 1 and 999, survey numbers between 1 and 9999.

(c) No more than 50 years may be represented in a single data set.

(d) All data on a final data set, ready for input to the analysis routines, should be in the same units and referenced to the same vertical and horizontal datum.

(e) In computations using the distance between profile lines, the lines are assumed to be parallel.

APPENDIX E

SAMPLE CODING FORMS

FOR

SURVEY INPUT DATA

PROFILE SURVEY DATA
CODING FORM

SURVEY REPORT
(INITIAL SHEET)

BEACH EVALUATION PROGRAM
COASTAL ENGINEERING RESEARCH CENTER
KINGMAN BUILDING
FT. BELVOIR, VA 22060

LOCALITY CODE [ ][ ][ ][ ][ ]
　　　　　　　　1　2　3　4　5

SURVEY NUMBER [ ][ ][ ][ ]
　　　　　　　　　6　7　8　9

SHEET NUMBER [ ][ ] OF [ ][ ]
　　　　　　　　10 11　　　12 13

SURVEY DATE [ ][ ] [ ][ ] [ ][ ]
　　　　　　　YR　　MO　　DAY
　　　　　　　14 15　16 17　18 19

TIME [ ][ ]　[ ][ ]
　　　22 23　24 25

DATUM [ ]
　　　26

0 SWL	3 MTL	6 MHW	9 MLL
1 NGVD	4 MLW	7 IGLD	
2 MSL	5 MLLW	8 LWD	
A OTHER _____			

DATA IS COLLECTED IN [ ][ ]
　　　　　　　　　　　 27 28
　　　　　　　(FT, M, ETC.)

NAME OF BEACH

LOCATION (PROFILE OR PROFILE NO.)

SURVEY METHOD
1 LEVEL AND TAPE
2 STADIA
3 EMERY　　　　[ ]
4 HAND LEVELING
5 OTHER

IF THERE HAS BEEN ANY CHANGE
IN PROFILE BENCHMARK SINCE
LAST REPORT, CHECK BOX (✓)
AND COMMENT ON BACK OF THIS
FORM [ ]

IF YOU HAVE ANY OTHER COMMENT
CHECK BOX (✓) AND USE THE BACK
OF THIS FORM [ ]

DISTANCE MUST BE IN ASCENDING ORDER

±	(1000)(100)(10) (1)
[ ]	[ ][ ][ ][ ]
31	32 33 34 35
[ ]	[ ][ ][ ][ ]
41	42 43 44 45
[ ]	[ ][ ][ ][ ]
51	52 53 54 55
[ ]	[ ][ ][ ][ ]
61	62 63 64 65
[ ]	[ ][ ][ ][ ]
71	72 73 74 75

ELEVATION

±	(100)(10) (1)	(.1)
[ ]	[ ][ ][ ]	[ ]
36	37 38 39	40
[ ]	[ ][ ][ ]	[ ]
46	47 48 49	50
[ ]	[ ][ ][ ]	[ ]
56	57 58 59	60
[ ]	[ ][ ][ ]	[ ]
66	67 68 69	70
[ ]	[ ][ ][ ]	[ ]
76	77 78 79	80

PARTY CHIEF

FORM FILLED BY　DATE

PROFILE SURVEY DATA
CODING FORM

SURVEY REPORT
(CONTINUATION SHEET)

BEACH EVALUATION PROGRAM
COASTAL ENGINEERING RESEARCH CENTER
KINGMAN BUILDING
FT. BELVOIR, VA. 22060

LOCALITY CODE ☐☐☐☐☐
1 2 3 4 5

SURVEY NUMBER ☐☐☐☐
6 7 8 9

SHEET NUMBER ☐☐ OF ☐☐
10 11　　　12 13

NAME OF BEACH

LOCATION (PROFILE OR PROFILE NO.)

DISTANCE
(MUST BE IN ASCENDING ORDER)

ELEVATION

± (1000)(100)(10) (1)
☐ ☐☐☐☐
21　22 23 24 25

± (100)(10) (1) (.1)
☐ ☐☐☐ ☐
26　27 28 29　30

±
☐ ☐☐☐☐
31　32 33 34 35

±
☐ ☐☐☐ ☐
36　37 38 39　40

±
☐ ☐☐☐☐
41　42 43 44 45

±
☐ ☐☐☐ ☐
46　47 48 49　50

±
☐ ☐☐☐☐
51　52 53 54 55

±
☐ ☐☐☐ ☐
56　57 58 59　60

±
☐ ☐☐☐☐
61　62 63 64 65

±
☐ ☐☐☐ ☐
66　67 68 69　70

±
☐ ☐☐☐☐
71　72 73 74 75

±
☐ ☐☐☐ ☐
76　77 78 79　80

APPENDIX F

SAMPLE SURVEY INPUT DATA, EDIT1 AND EDIT2

These sample input data, input to the EDIT1 and EDIT2 programs, were used to create the final data file used by the analysis routines. All sample outputs in the series, except those which demonstrate features not available from these data, were created using the input. Any output not created by these data is so identified.

```
34   1   1 1 2750108  1000cFT  +   0+ 142+  16+ 190+  24+ 240+  41+ 191+  58+ 154
34   1   1 2 2         +  75+ 113+  68+  95+ 100+  82+ 114+  71+ 165+  15+ 196-  20
34   1   2 1 2750535  1100cFT  +   0+ 142+  16+ 197+  29+ 247+  41+ 187+  54+ 135
34   1   2 2 2         + 100+  88+ 105+  82+ 113+  67+ 155+  31+ 206+  20
34   1   3 1 3750028  1100cFT  +   0+ 143+  16+ 197+  29+ 247+  52+ 245+  57+ 205
34   1   3 2 3         +  44+ 173+  57+ 138+  73+ 114+  91+  92+ 100+  86+ 124+  74
34   1   3 3 3         + 141+  65+ 161+  40+ 182+  13+ 200-  13+ 207+  20
34   1   4 1 3750602  1100cFT  +   0+ 142+  16+ 196+  29+ 246+  32+ 200+  57+ 204
34   1   4 2 3         +  44+ 177+  57+ 135+  75+ 110+  90+  94+ 100+  89+ 128+  64
34   1   4 3 3         + 150+  54+ 166+  40+ 182+  24+ 200-   2+ 205+   7+ 225-  21
34   1   5 1 3750702  1000cFT  +   0+ 142+  16+ 197+  29+ 247+  32+ 242+  43+ 180
34   1   5 2 3         +  55+ 143+  78+ 112+ 100+ 103+ 119+  84+ 144+  67+ 175+  38
34   1   5 3 3         + 200+  16+ 219-   7
34   1   6 1 3750909  1500cFT  +   0+ 142+  16+ 190+  20+ 239+  29+ 240+  32+ 243
34   1   6 2 3         +  57+ 210+  52+ 148+  59+ 133+  80+ 111+ 100+ 105+ 126+ 101
34   1   6 3 3         + 134+  84+ 158+  69+ 186+  38+ 800+  21+ 236-  21
34   1   7 1 3751028   700cFT  +   0+ 142+  16+ 197+  29+ 247+  41+ 187+  58+ 155
34   1   7 2 3         +  77+ 114+ 100+ 105+ 116+ 105+ 127+  90+ 157+  84+ 191+  12
34   1   7 3 3         + 200+   0+ 222-   3+ 243+   0+ 257-  11+ 279-  20
34   1   8 1 2751125  1100cFT  +   0+ 144+  16+ 192+  29+ 248+  41+ 192+  58+ 137
34   1   8 2 2         +  88+ 107+ 100+ 101+ 150+  76+ 200+  12+ 230+  22
34   1   9 1 2750105  1100cFT  +   0+ 142+  16+ 194+  29+ 248+  41+ 190+  62+ 150
34   1   9 2 2         +  85+ 114+ 100+ 103+ 116+  89+ 155+  61+ 200+  13+ 229-  20
34   1  10 1 3750311   800cFT  +   0+ 142+  25+ 235+  27+ 247+  30+ 248+  33+ 245
34   1  10 2 3         +  37+ 200+  50+ 157+  60+ 131+  75+ 116+ 100+ 100+ 125+  69
34   1  10 3 3         + 150+  43+ 175+  22+ 200+   0+ 225-  14+ 243+  24
34   1  11 1 3750006  1400cFT  +   0+ 143+  25+ 228+  28+ 247+  31+ 209+  33+ 245
34   1  11 2 4         +  58+ 211+  50+ 162+  62+ 131+  75+ 117+ 100+ 104+ 115+  82
34   1  11 3 4         + 125+  75+ 150+  55+ 175+  34+ 189+  22+ 200+  15+ 215+   0
34   1  11 4 4         + 225+  13+ 233+  23
34   1  12 1 2750808  1300cFT  +   0+ 143+  29+ 251+  60+ 130+ 100+  91+ 150+  57
34   1  12 2 2         + 180+  23+ 200-  16+ 232-  25
34   1  13 1 3750707  1200cFT  +   0+ 144+  25+ 233+  30+ 230+  50+ 163+  75+ 118
34   1  13 2 3         + 100+  94+ 125+  75+ 150+  59+ 175+  35+ 200+  10+ 225-  19
34   1  13 3 3         + 250-  35
34   1  14 1 3750027   900cFT  +   0+ 143+  25+ 234+  30+ 249+  50+ 156+  75+ 117
34   1  14 2 3         + 100+  94+ 125+  82+ 150+  68+ 166+  46+ 175+  28+ 200+   5
34   1  14 3 3         + 201+   1+ 211-   7+ 215-  20
34   1  15 1 3761215   900cFT  +   0+ 144+  25+ 242+  29+ 251+  50+ 155+  75+ 118
34   1  15 2 3         + 100+  96+ 104+  84+ 125+  93+ 150+  27+ 175+  14+ 200-   4
34   1  15 3 3         + 225+  10+ 235+  25
39   2   1 1 3750108  1000cFT  +   0+ 119+  32+ 132+  48+ 170+  61+ 209+  67+ 201
39   2   1 2 3         +  70+ 157+  93+ 119+ 184+ 102+ 166+  70+ 200+  42+ 215+  21
39   2   1 3 3         + 250-  23
39   2   2 1 3750303  1100cFT  +   0+ 118+  32+ 133+  48+ 170+  61+ 208+  67+ 194
39   2   2 2 3         +  78+ 156+  93+ 119+ 100+ 113+ 135+  94+ 146+  72+ 179+  41
39   2   2 3 3         + 200+  20+ 229-  21
39   2   3 1 3750028  1100cFT  +   0+ 119+  32+ 131+  48+ 175+  61+ 208+  68+ 195
39   2   3 2 3         +  78+ 163+  91+ 124+ 100+ 115+ 119+  91+ 138+  78+ 152+  69
39   2   3 3 3         + 175+  60+ 189+  45+ 200+  34+ 224+   8+ 244-  24
39   2   4 1 3750602  1100cFT  +   0+ 119+  32+ 131+  48+ 175+  61+ 209+  68+ 190
39   2   4 2 3         +  78+ 161+  91+ 123+ 100+ 115+ 114+  95+ 139+  87+ 156+  75
39   2   4 3 3         + 181+  59+ 188+  48+ 200+  34+ 216+  16+ 237-   8+ 254-  20
39   2   5 1 3750702  1000cFT  +   0+ 118+  32+ 131+  48+ 171+  61+ 208+  68+ 195
39   2   5 2 3         +  78+ 160+  91+ 130+ 100+ 117+ 135+  78+ 174+  47+ 200+  27
```

```
59  2  5  3  3          + 228-    5
59  2  6  1  3750909   14002FT  +   0+ 118+   32+ 131+   48+ 173+   61+ 200+   68+ 199
59  2  6  2  3         +  78+ 164+  91+ 124+  100+ 115+  125+  94+ 156+  65+ 188+   52
59  2  6  3  3         + 200+   21+ 229-    8+ 249-   32
59  2  7  1  3751028    7002FT  +   0+ 118+   32+ 132+   48+ 173+   61+ 208+   67+ 197
59  2  7  2  3         +  78+ 154+  93+ 127+  100+ 117+  112+  97+ 113+  91+ 157+   64
59  2  7  3  3         + 170+   53+ 200+    7+ 215-    8+ 229-   20
59  2  8  1  3751125   11002FT  +   0+ 119+   52+ 131+   48+ 173+   61+ 207+   67+ 196
59  2  8  2  3         +  78+ 154+  93+ 126+  100+ 118+  137+  66+ 102+  50+ 200+    8
59  2  8  3  3         + 230-   53
59  2  9  1  3760105   11002FT  +   0+ 120+   32+ 131+   48+ 170+   61+ 204+   67+ 203
59  2  9  2  3         +  78+ 163+  93+ 117+  100+ 105+  132+  75+ 175+  35+ 200+    1
59  2  9  3  3         + 221-   21
59  2 10  1  3760311    9002FT  +   0+ 119+   17+ 124+   22+ 131+   25+ 130+   33+ 134
59  2 10  2  3         +  50+ 177+  61+ 209+   66+ 203+   75+ 185+   84+ 136+  100+ 107
59  2 10  3  3         + 125+   84+ 150+   59+ 175+   38+ 200+   13+ 225-   16+ 240-   25
59  2 11  1  4760406   14002FT  +   0+ 119+   17+ 122+   23+ 130+   31+ 129+   37+ 134
59  2 11  2  4         +  63+ 209+  68+ 202+   70+ 195+   75+ 174+   91+ 122+  100+ 108
59  2 11  3  4         + 125+   81+ 131+   76+ 150+   54+ 160+   43+ 175+   29+ 200+    8
59  2 11  4  4         + 225-    8+ 237-   21
59  2 12  1  2760608   14002FT  +   0+ 119+   30+ 130+   50+ 179+   62+ 209+   97+ 112
59  2 12  2  2         + 107+   90+ 157+   47+ 184+   21+ 207+    4+ 229-   22
59  2 13  1  3760707   12002FT  +   0+ 119+   25+ 130+   34+ 134+   50+ 178+   62+ 209
59  2 13  2  3         +  75+ 174+ 100+ 106+  185+   74+ 150+   52+ 175+  89+ 200+    8
59  2 13  3  3         + 232-   24
59  2 14  1  3760927   10002FT  +   0+ 119+   25+ 130+   50+ 176+   60+ 204+   75+ 162
59  2 14  2  3         +  95+ 115+ 100+ 101+  185+   70+ 150+   65+ 175+  25+ 200-    3
59  2 14  3  3         + 210-   12+ 218-   21
59  2 15  1  3761215    9002FT  +   0+ 120+   25+ 131+   50+ 183+   61+ 208+   75+ 169
59  2 15  2  3         + 100+ 102+ 125+   53+ 150+   24+ 175+   19+ 200+    5+ 225-   12
59  2 15  3  3         + 250-   29
59  3  1  1  3750106   11002FT  +   0+ 130+   80+ 126+   37+ 150+   20+ 185+   79+ 172
59  3  1  2  3         + 100+ 174+ 115+ 164+  139+ 121+  168+ 110+ 200+  96+ 223+   64
59  3  1  3  3         + 250+   35+ 275+    8+ 300-   20
59  3  2  1  3750303   11002FT  +   0+ 130+   80+ 128+   37+ 153+   50+ 185+   68+ 182
59  3  2  2  3         +  79+ 172+ 100+ 175+  115+ 163+  139+ 118+ 150+ 113+ 185+ 105
59  3  2  3  3         + 191+   84+ 200+   72+ 213+   53+ 247+   16+ 285-   26
59  3  3  1  4750428   11002FT  +   0+ 130+   80+ 126+   37+ 153+   50+ 185+   68+ 181
59  3  3  2  4         +  79+ 173+ 100+ 174+  115+ 165+  126+ 145+ 136+ 121+ 155+ 115
59  3  3  3  4         + 172+ 110+ 192+   86+ 200+   77+ 224+   58+ 249+   30+ 268+    9
59  3  3  4  4         + 294-   21
59  3  4  1  4750602   11002FT  +   0+ 130+   80+ 126+   37+ 153+   50+ 185+   68+ 181
59  3  4  2  4         +  79+ 171+ 100+ 174+  115+ 166+  126+ 147+ 136+ 121+ 149+ 113
59  3  4  3  4         + 166+ 113+ 182+   99+ 200+   82+ 223+   75+ 238+   56+ 253+   31
59  3  4  4  4         + 280-    5+ 298-   20
59  3  5  1  3750702   11002FT  +   0+ 130+   80+ 126+   37+ 152+   50+ 185+   68+ 181
59  3  5  2  3         +  79+ 172+ 100+ 175+  115+ 166+  126+ 149+ 136+ 123+ 162+ 115
59  3  5  3  3         + 185+ 103+ 200+   91+ 241+   57+ 264+   51+ 286+    6+ 295-    8
59  3  6  1  4750909   16002FT  +   0+ 129+   80+ 126+   37+ 151+   50+ 184+   68+ 181
59  3  6  2  4         +  79+ 171+ 100+ 174+  115+ 164+  126+ 147+ 136+ 121+ 153+ 112
59  3  6  3  4         + 173+ 106+ 200+   92+ 231+   78+ 252+   43+ 281+    8+ 300-   16
59  3  6  4  4         + 308-   34
59  3  7  1  3751028    8002FT  +   0+ 130+   80+ 126+   37+ 152+   50+ 185+   79+ 171
59  3  7  2  3         + 100+ 175+ 115+ 165+  139+ 118+  176+ 109+ 200+ 103+ 213+ 102
59  3  7  3  3         + 250+   77+ 254+   44+ 289-    3+ 305-   20
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57

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39   5   A 1 3751*2A   7002FT  +   0+ 129+  20+ 126+  37+ 151+  50+ 187+  79+ 172
39   5   A 2 5          +  100+ 174+ 115+ 165+ 139+ 120+ 189+ 112+ 200+ 100+ 246+  54
39   5   A 5 5          + 292+   8+ 331-  23
39   5   9 1 3761155   12002FT  +   0+ 130+  20+ 126+  37+ 152+  50+ 186+  79+ 172
39   5   9 2 5          + 100+ 175+ 115+ 166+ 139+ 120+ 168+ 114+ 200+ 100+ 228+  70
39   5   9 3 5          + 284+   2+ 302-  20
39   5   1 1 376 511    9002FT  +   0+ 130+  19+ 125+  25+ 131+  39+ 155+  50+ 186
39   5   1 2 5          +  69+ 181+  75+ 175+  79+ 171+  84+ 176+  89+ 171+  97+ 179
39   5   1 3 5          + 100+ 177+ 125+ 157+ 127+ 151+ 131+ 156+ 135+ 187+ 150+ 116
39   5   1 4 5          + 175+ 114+ 191+ 109+ 200+  98+ 225+  72+ 240+  53+ 250+  46
39   5   1 5 5          + 275+  20+ 300-   8+ 319-  26
39   5  11 1 376 008   15002FT  +   0+ 129+  22+ 127+  25+ 130+  31+ 142+  37+ 149
39   5  11 2 5          +  42+ 161+  49+ 185+  69+ 181+  80+ 172+  93+ 170+  98+ 178
39   5  11 3 5          + 100+ 175+ 108+ 176+ 118+ 164+ 126+ 156+ 136+ 186+ 150+ 117
39   5  11 4 5          + 175+ 114+ 190+ 108+ 200+  99+ 225+  71+ 250+  54+ 275+  32
39   5  11 5 5          + 300+   1+ 325+  17+ 329-  22
39   5  12 1 376 808   19002FT  +   0+ 129+  20+ 126+  52+ 183+  78+ 171+ 102+ 177
39   5  12 2 5          + 122+ 160+ 142+ 117+ 150+ 117+ 184+ 108+ 204+  81+ 250+  40
39   5  12 3 5          + 298-  14+ 303-  20
39   5  13 1 376 07 7  13002FT  +   0+ 130+  25+ 131+  50+ 186+  75+ 175+ 100+ 174
39   5  13 2 5          + 125+ 161+ 150+ 118+ 175+ 115+ 200+  94+ 225+  69+ 250+  51
39   5  13 3 5          + 275+  27+ 300+   1+ 316-  16+ 325-  23
39   5  14 1 376 927   11002FT  +   0+ 130+  25+ 130+  50+ 187+  75+ 174+  93+ 171
39   5  14 2 5          + 100+ 176+ 125+ 156+ 137+ 125+ 150+ 116+ 175+ 112+ 200+  94
39   5  14 3 5          + 225+  80+ 250+  40+ 275+  10+ 300-  15+ 310-  21
39   5  15 1 4761215    9002FT  +   0+ 129+  20+ 126+  50+ 187+  75+ 174+  94+ 173
39   5  15 2 4          + 100+ 177+ 125+ 157+ 132+ 140+ 150+ 116+ 175+ 111+ 197+  93
39   5  15 3 4          + 200+  71+ 225+  30+ 250+   8+ 275-   6+ 300+  18+ 309-  17
39   5  15 4 4          + 328-  19+ 350-  20+ 375-  23
39   4   1 1 3750106   11002FT  +   0+ 159+  27+ 164+  54+ 167+  71+ 197+  81+ 227
39   4   1 2 5          + 100+ 213+ 114+ 195+ 131+ 190+ 138+ 202+ 157+ 172+ 186+ 115
39   4   1 3 5          + 200+ 101+ 250+  91+ 291+  15+ 324-  20
39   4   2 1 3750303   12002FT  +   0+ 159+  27+ 164+  54+ 166+  71+ 197+  81+ 226
39   4   2 2 5          + 100+ 211+ 118+ 191+ 131+ 191+ 138+ 199+ 157+ 167+ 186+ 112
39   4   2 3 5          + 200+  98+ 223+  89+ 241+  72+ 287+  12+ 300-   3+ 310-  24
39   4   3 1 375 028   12002FT  +   0+ 159+  27+ 164+  54+ 166+  71+ 199+  81+ 225
39   4   3 2 4          + 100+ 211+ 118+ 192+ 131+ 190+ 138+ 202+ 157+ 167+ 167+ 150
39   4   3 3 4          + 180+ 123+ 200+  84+ 229+  65+ 252+  44+ 277+  17+ 300-   9
39   4   3 4 4          + 312-  24
39   4   4 1 375 06 2  12002FT  +   0+ 158+  27+ 164+  54+ 165+  71+ 195+  81+ 225
39   4   4 2 4          + 100+ 212+ 118+ 192+ 131+ 189+ 138+ 202+ 157+ 168+ 167+ 153
39   4   4 3 4          + 180+ 123+ 188+ 109+ 200+  88+ 215+  79+ 234+  67+ 248+  54
39   4   4 4 4          + 265+  32+ 282+   7+ 296-   7+ 310-  20
39   4   5 1 3750702   11002FT  +   0+ 159+  27+ 165+  54+ 165+  71+ 185+  81+ 227
39   4   5 2 5          + 100+ 210+ 118+ 192+ 131+ 190+ 138+ 202+ 157+ 169+ 167+ 152
39   4   5 3 5          + 180+ 123+ 200+  91+ 240+  55+ 276+  19+ 295+   0
39   4   6 1 4750909   16002FT  +   0+ 158+  27+ 164+  54+ 164+  71+ 196+  81+ 225
39   4   6 2 4          + 100+ 211+ 118+ 192+ 131+ 191+ 138+ 202+ 157+ 168+ 167+ 150
39   4   6 3 4          + 180+ 123+ 190+ 106+ 200+  97+ 225+  72+ 239+  61+ 261+  38
39   4   6 4 4          + 300-   1+ 325-  23
39   4   7 1 375 1028   8002FT  +   0+ 158+  27+ 165+  54+ 165+  71+ 195+  81+ 226
39   4   7 2 4          + 100+ 211+ 118+ 191+ 131+ 189+ 138+ 202+ 165+ 155+ 179+ 123
39   4   7 3 4          + 200+  98+ 211+  91+ 241+  93+ 256+  73+ 284+  41+ 300+  24
39   4   7 4 4          + 328+   0+ 350-  23
39   4   8 1 3751126    8002FT  +   0+ 158+  27+ 167+  54+ 164+  71+ 195+  81+ 226
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58

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39  4   8 2 3       +  100+ 210+ 118+ 191+ 131+ 190+ 138+ 201+ 165+ 154+ 179+ 124
39  4   8 3 3       +  200+ 107+ 244+  72+ 278+  40+ 300+  14+ 313-   2+ 342-  45
39  4   9 1 3760105 1200EFT  +   0+ 158+  87+ 165+  54+ 166+  71+ 196+  81+ 227
39  4   9 2 3       +  100+ 211+ 118+ 192+ 131+ 190+ 138+ 201+ 165+ 157+ 179+ 125
39  4   9 3 3       +  200+ 107+ 230+  84+ 253+  63+ 300+  10+ 322-  20
39  4  10 1 5760311 1000EFT  +   0+ 158+  19+ 168+  25+ 167+  45+ 160+  50+ 163
39  4  10 2 5       +   60+ 173+  67+ 184+  75+ 204+  81+ 226+ 100+ 213+ 125+ 189
39  4  10 3 5       +  131+ 189+ 134+ 192+ 139+ 201+ 150+ 180+ 175+ 134+ 161+ 125
39  4  10 4 5       +  200+ 109+ 225+  97+ 250+  77+ 275+  49+ 300+  25+ 325-   3
39  4  10 5 5       +  350-  23
39  4  11 1 5760406 1500EFT  +   0+ 159+  25+ 167+  43+ 158+  50+ 163+  55+ 166
39  4  11 2 5       +   67+ 184+  75+ 205+  83+ 225+ 100+ 215+ 125+ 190+ 135+ 191
39  4  11 3 5       +  141+ 202+ 143+ 198+ 150+ 183+ 168+ 155+ 175+ 144+ 182+ 126
39  4  11 4 5       +  200+ 109+ 225+ 100+ 233+  93+ 241+  78+ 250+  67+ 263+  50
39  4  11 5 5       +  275+  35+ 282+  18+ 300+  10+ 313+   0+ 325-   9+ 338-  21
39  4  12 1 3760608 1500EFT  +   0+ 158+  50+ 163+  81+ 225+ 126+ 190+ 138+ 200
39  4  12 2 3       +  150+ 174+ 179+ 125+ 200+ 110+ 250+ 102+ 283+  57+ 300+  37
39  4  12 3 3       +  324+   0+ 350-  14+ 354-  26
39  4  13 1 4760707 1500EFT  +   0+ 159+  25+ 166+  50+ 162+  75+ 200+  85+ 225
39  4  13 2 4       +  100+ 212+ 125+ 189+ 138+ 201+ 150+ 178+ 175+ 136+ 200+ 108
39  4  13 3 4       +  225+ 100+ 250+  98+ 275+  65+ 300+  38+ 325+  16+ 350-   8
39  4  13 4 4       +  365-  20
39  4  14 1 4760927 1100EFT  +   0+ 158+  25+ 160+  50+ 164+  75+ 200+  82+ 226
39  4  14 2 4       +  100+ 212+ 125+ 190+ 139+ 201+ 155+ 172+ 175+ 137+ 200+ 108
39  4  14 3 4       +  225+ 102+ 250+  93+ 275+  81+ 278+  67+ 292+  46+ 300+  34
39  4  14 4 4       +  325+  12+ 347+   0+ 370-  12+ 385-  21
39  4  15 1 3761215 1000EFT  +   0+ 158+  25+ 168+  50+ 158+  82+ 225+ 100+ 216
39  4  15 2 3       +  125+ 191+ 144+ 200+ 165+ 166+ 185+ 131+ 200+ 112+ 225+ 104
39  4  15 3 3       +  241+ 100+ 266+  67+ 290+  38+ 300+  27+ 325+   3+ 350-  23
39  5   1 1 3750000 1200EFT  +   0+ 143+  18+ 160+  52+ 184+ 100+ 185+ 143+ 201
39  5   1 2 3       +  152+ 218+ 166+ 214+ 174+ 208+ 183+ 231+ 196+ 206+ 212+ 125
39  5   1 3 3       +  248+  90+ 263+  84+ 300+  46+ 332+  19+ 353-  20
39  5   2 1 4750505 1200EFT  +   0+ 144+  18+ 164+  52+ 183+ 100+ 193+ 121+ 192
39  5   2 2 4       +  143+ 209+ 152+ 222+ 166+ 207+ 174+ 213+ 183+ 224+ 196+ 185
39  5   2 3 4       +  212+ 120+ 232+ 105+ 248+  92+ 269+  73+ 300+  57+ 331+  19
39  5   2 4 4       +  358-  20
39  5   3 1 4750428 1200EFT  +   0+ 144+  18+ 162+  52+ 185+ 100+ 181+ 121+ 194
39  5   3 2 4       +  143+ 209+ 152+ 219+ 166+ 207+ 174+ 214+ 183+ 228+ 196+ 188
39  5   3 3 4       +  200+ 150+ 210+ 126+ 221+ 115+ 242+ 101+ 263+  87+ 284+  70
39  5   3 4 4       +  300+  57+ 327+  20+ 352+   5+ 372-  20
39  5   4 1 4750602 1200EFT  +   0+ 144+  18+ 163+  52+ 188+ 100+ 187+ 121+ 192
39  5   4 2 4       +  143+ 200+ 152+ 218+ 166+ 209+ 174+ 207+ 183+ 231+ 196+ 199
39  5   4 3 4       +  200+ 165+ 210+ 131+ 222+ 115+ 245+ 104+ 259+  91+ 278+  70
39  5   4 4 4       +  300+  51+ 316+  32+ 352+   7+ 369-  20
39  5   5 1 4750702 1100EFT  +   0+ 144+  18+ 160+  52+ 189+ 100+ 190+ 121+ 192
39  5   5 2 4       +  143+ 207+ 152+ 220+ 166+ 209+ 174+ 206+ 183+ 232+ 196+ 200
39  5   5 3 4       +  200+ 168+ 210+ 132+ 223+ 118+ 258+  91+ 300+  84+ 344+   9
39  5   5 4 4       +  360-  11
39  5   6 1 4750909 1000EFT  +   0+ 145+  18+ 164+  52+ 194+ 100+ 180+ 121+ 197
39  5   6 2 4       +  143+ 209+ 152+ 218+ 166+ 206+ 174+ 211+ 183+ 228+ 196+ 178
39  5   6 3 4       +  204+ 144+ 210+ 127+ 224+ 113+ 246+ 103+ 262+  94+ 280+  76
39  5   6 4 4       +  300+  57+ 332+  28+ 357+   2+ 379-  23
39  5   7 1 4751028 800EFT   +   0+ 145+  18+ 161+  52+ 188+ 100+ 200+ 143+ 214
39  5   7 2 4       +  152+ 224+ 166+ 206+ 174+ 212+ 183+ 227+ 196+ 175+ 212+ 125
39  5   7 3 4       +  238+ 107+ 259+  98+ 273+  91+ 294+  67+ 300+  60+ 326+  31
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39  5   7  4  4      +  349+    5+  367-   11+ 383-   38
39  5   8  1  3751126   R002FT  +    0+ 144+   18+ 162+   52+ 186+ 100+ 199+ 143+ 206
39  5   8  2  3        +  152+ 220+ 166+ 208+ 174+ 207+ 183+ 230+ 196+ 200+ 212+ 131
39  5   8  3  3        +  252+ 115+ 300+   65+ 333+   30+ 366-    8+ 391+   34
39  5   9  1  3760105  12002FT  +    0+ 144+   18+ 162+   52+ 186+ 100+ 197+ 143+ 220
39  5   9  2  3        +  152+ 215+ 166+ 210+ 174+ 213+ 183+ 215+ 196+ 201+ 212+ 124
39  5   9  3  3        +  220+ 118+ 246+ 112+ 284+   79+ 300+   53+ 341+   10+ 369-   26
39  5  10  1  4760311  10002FT  +    0+ 146+   25+ 170+   50+ 186+ 100+ 189+ 125+ 193
39  5  10  2  4        +  150+ 219+ 163+ 212+ 175+ 209+ 182+ 233+ 188+ 225+ 196+ 201
39  5  10  3  4        +  200+ 180+ 212+ 132+ 225+ 121+ 250+ 115+ 257+ 106+ 275+   85
39  5  10  4  4        +  297+   54+ 300+   55+ 325+   30+ 350-    3+ 368-   21
39  5  11  1  3760406  16002FT  +    0+ 148+   25+ 170+   50+ 184+   75+ 182+ 100+ 196
39  5  11  2  5        +  125+ 192+ 141+ 199+ 152+ 220+ 158+ 219+ 166+ 211+ 175+ 206
39  5  11  3  5        +  184+ 234+ 186+ 230+ 195+ 210+ 200+ 183+ 213+ 129+ 225+ 121
39  5  11  4  5        +  250+ 115+ 259+ 104+ 270+   79+ 287+   60+ 300+   37+ 314+   23
39  5  11  5  5        +  325+   14+ 350-    6+ 368-   25
39  5  12  1  3760608  15002FT  +    0+ 148+   50+ 186+ 100+ 195+ 150+ 220+ 170+ 206
39  5  12  2  3        +  181+ 236+ 200+ 170+ 209+ 137+ 243+ 110+ 256+   84+ 300+   73
39  5  12  3  3        +  331+   48+ 350+   31+ 397-   22
39  5  13  1  4760707  14002FT  +    0+ 152+   25+ 171+   50+ 186+   75+ 182+ 100+ 203
39  5  13  2  4        +  125+ 195+ 150+ 220+ 173+ 206+ 184+ 229+ 200+ 168+ 213+ 129
39  5  13  3  4        +  238+ 115+ 257+   83+ 275+   80+ 300+   71+ 321+   47+ 350+   48
39  5  13  4  4        +  375+   21+ 400+    7+ 417-   13+ 430-   22
39  5  14  1  4760927  12002FT  +    0+ 154+   25+ 172+   50+ 187+   75+ 183+ 100+ 190
39  5  14  2  4        +  125+ 195+ 150+ 221+ 171+ 206+ 180+ 235+ 200+ 160+ 214+ 126
39  5  14  3  4        +  240+ 113+ 250+   90+ 275+   86+ 300+   68+ 320+   37+ 345+    9
39  5  14  4  4        +  370-    4+ 391+   24
39  5  15  1  4761215  10002FT  +    0+ 154+   25+ 171+   50+ 186+   75+ 182+ 100+ 201
39  5  15  2  4        +  125+ 195+ 150+ 221+ 173+ 206+ 181+ 238+ 200+ 167+ 217+ 124
39  5  15  3  4        +  240+ 114+ 250+   98+ 275+   78+ 300+   45+ 325+   31+ 350+   12
39  5  15  4  4        +  375-    8+ 385-   19
39  6   1  1  3750106  13002FT  +    0+ 120+   50+ 131+ 100+ 145+ 112+ 155+ 135+ 172
39  6   1  2  3        +  151+ 193+ 171+ 193+ 189+ 169+ 220+ 123+ 250+   90+ 300+   49
39  6   1  3  3        +  330+   23+ 358-   10+ 369-   22
39  6   2  1  3750303  12002FT  +    0+ 120+   50+ 132+ 100+ 146+ 112+ 156+ 135+ 174
39  6   2  2  3        +  151+ 193+ 171+ 190+ 189+ 166+ 220+ 122+ 252+   86+ 269+   69
39  6   2  3  3        +  300+   52+ 342+   12+ 367-   22
39  6   3  1  4750428  12002FT  +    0+ 121+   50+ 131+ 100+ 146+ 112+ 152+ 135+ 171
39  6   3  2  4        +  151+ 192+ 171+ 193+ 189+ 167+ 200+ 155+ 211+ 137+ 220+ 121
39  6   3  3  4        +  237+ 107+ 257+   95+ 284+   86+ 300+   68+ 314+   57+ 332+   36
39  6   3  4  4        +  364+    4+ 380-   20
39  6   4  1  4750602  12002FT  +    0+ 120+   50+ 130+ 100+ 145+ 112+ 153+ 135+ 172
39  6   4  2  4        +  151+ 193+ 171+ 192+ 189+ 168+ 200+ 154+ 211+ 132+ 220+ 120
39  6   4  3  4        +  234+ 107+ 254+   95+ 273+   88+ 280+   73+ 300+   53+ 329+   34
39  6   4  4  4        +  348+   16+ 363+    2+ 390-   24
39  6   5  1  3750702  11002FT  +    0+ 120+   50+ 130+ 100+ 145+ 112+ 156+ 135+ 171
39  6   5  2  3        +  151+ 193+ 171+ 192+ 189+ 168+ 200+ 154+ 211+ 134+ 220+ 121
39  6   5  3  3        +  236+ 105+ 268+   81+ 300+   61+ 337+   23+ 358-    6
39  6   6  1  3750909  16002FT  +    0+ 120+   50+ 131+ 100+ 145+ 112+ 151+ 135+ 171
39  6   6  2  3        +  151+ 192+ 171+ 192+ 189+ 167+ 200+ 150+ 220+ 121+ 231+ 110
39  6   6  3  3        +  254+   93+ 281+   71+ 300+   54+ 322+   35+ 351+    4+ 374-   20
39  6   7  1  3751028  9002FT   +    0+ 121+   50+ 131+ 100+ 147+ 112+ 156+ 135+ 174
39  6   7  2  3        +  151+ 194+ 171+ 193+ 189+ 167+ 220+ 122+ 253+   95+ 276+   82
39  6   7  3  3        +  300+   61+ 330+   29+ 353+    4+ 383-   36
39  6   8  1  3751126   R002FT  +    0+ 121+   50+ 129+ 100+ 146+ 112+ 152+ 135+ 170
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60

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39  6   8 2 3        + 151+ 193+ 171+ 193+ 189+ 168+ 220+ 124+ 264+ 106+ 265+  73
39  6   8 3 3        + 300+  57+ 337+  22+ 359+   4+ 400-  30
39  6   9 1 3760105  13002FT  +   0+ 121+  50+ 131+ 100+ 146+ 112+ 156+ 135+ 173
39  6   9 2 3        + 151+ 194+ 171+ 190+ 189+ 167+ 220+ 124+ 249+ 111+ 270+  83
39  6   9 3 3        + 300+  73+ 330+  34+ 362-   1+ 364-  33
39  6  10 1 4760311  11002FT  +   0+ 120+  25+ 121+  50+ 131+  75+ 137+ 100+ 146
39  6  10 2 3        + 125+ 162+ 150+ 190+ 161+ 192+ 173+ 192+ 175+ 190+ 192+ 167
39  6  10 3 4        + 198+ 161+ 200+ 156+ 225+ 123+ 250+ 113+ 275+  93+ 300+  77
39  6  10 4 4        + 325+  46+ 350+  23+ 375-  11+ 384-  22
39  6  11 1 5760006  17002FT  +   0+ 121+  25+ 119+  50+ 131+  75+ 136+ 100+ 147
39  6  11 2 5        + 115+ 155+ 125+ 163+ 142+ 178+ 150+ 191+ 169+ 194+ 175+ 192
39  6  11 3 5        + 198+ 161+ 200+ 158+ 222+ 129+ 225+ 126+ 234+ 118+ 250+ 112
39  6  11 4 5        + 275+  95+ 291+  85+ 300+  65+ 325+  38+ 350+  14+ 375-   2
39  6  11 5 5        + 400-  23
39  6  12 1 2760008  16002FT  +   0+ 120+  50+ 131+ 100+ 146+ 150+ 162+ 167+ 193
39  6  12 2 2        + 200+ 153+ 230+ 119+ 250+ 113+ 890+  63+ 378-  12+ 388-  21
39  6  13 1 4760707  14002FT  +   0+ 120+  25+ 120+  50+ 128+  75+ 137+ 100+ 145
39  6  13 2 4        + 125+ 164+ 150+ 191+ 175+ 189+ 800+ 156+ 225+ 184+ 250+ 112
39  6  13 3 4        + 275+  77+ 300+  54+ 325+  39+ 339+  27+ 350+  15+ 375-   6
39  6  13 4 4        + 397-  27
39  6  14 1 4760927  14002FT  +   0+ 120+  25+ 120+  50+ 130+  75+ 138+ 100+ 146
39  6  14 2 3        + 125+ 164+ 150+ 192+ 172+ 193+ 190+ 160+ 200+ 156+ 225+ 124
39  6  14 3 3        + 250+ 107+ 261+  80+ 275+  65+ 296+  60+ 300+  57+ 325+  26
39  6  14 4 4        + 350+   3+ 375-  21
39  6  15 1 4761215  12002FT  +   0+ 121+  25+ 122+  50+ 131+  75+ 138+ 100+ 146
39  6  15 2 4        + 125+ 163+ 150+ 192+ 175+ 188+ 800+ 153+ 222+ 140+ 230+ 119
39  6  15 3 4        + 250+ 107+ 275+  76+ 300+  60+ 325+  35+ 350+  21+ 375+   2
39  6  15 4 4        + 392+  14+ 402-  20
39  7   1 1 3750106  13002FT  +   0+ 127+  32+ 160+  53+ 195+  79+ 203+ 100+ 207
39  7   1 2 3        + 115+ 173+ 127+ 181+ 152+ 219+ 179+ 223+ 196+ 182+ 221+ 127
39  7   1 3 3        + 220+ 108+ 250+  78+ 284+  54+ 300+  43+ 317+  28+ 366+  26
39  7   2 1 3750303  12002FT  +   0+ 127+  32+ 160+  53+ 198+  79+ 200+ 100+ 206
39  7   2 2 3        + 115+ 175+ 127+ 184+ 152+ 219+ 179+ 221+ 196+ 182+ 221+ 131
39  7   2 3 3        + 250+ 102+ 251+  81+ 278+  62+ 300+  52+ 350+  12+ 372-  19
39  7   3 1 4750428  13002FT  +   0+ 128+  32+ 157+  53+ 198+  79+ 204+ 100+ 208
39  7   3 2 4        + 115+ 173+ 127+ 178+ 152+ 218+ 179+ 220+ 187+ 211+ 196+ 185
39  7   3 3 4        + 200+ 171+ 207+ 152+ 221+ 131+ 236+ 114+ 236+ 106+ 260+  98
39  7   3 4 4        + 284+  84+ 300+  70+ 315+  53+ 358+  11+ 380-  20
39  7   4 1 5750602  12002FT  +   0+ 127+  32+ 159+  53+ 198+  79+ 208+ 100+ 204
39  7   4 2 5        + 115+ 173+ 127+ 178+ 152+ 219+ 179+ 222+ 187+ 210+ 196+ 182
39  7   4 3 5        + 200+ 167+ 209+ 150+ 221+ 129+ 226+ 113+ 234+ 106+ 262+  96
39  7   4 4 5        + 280+  70+ 300+  58+ 317+  49+ 329+  35+ 346+  12+ 362-   5
39  7   4 5 5        + 378+  20
39  7   5 1 4750702  12002FT  +   0+ 127+  32+ 155+  53+ 196+  79+ 206+ 100+ 204
39  7   5 2 4        + 115+ 174+ 127+ 177+ 152+ 218+ 179+ 222+ 187+ 209+ 196+ 183
39  7   5 3 4        + 200+ 166+ 207+ 150+ 221+ 131+ 226+ 121+ 243+ 108+ 265+  87
39  7   5 4 4        + 300+  64+ 335+  39+ 355+  18+ 370-   7
39  7   6 1 4750909  16002FT  +   0+ 128+  32+ 156+  53+ 196+  79+ 205+ 100+ 203
39  7   6 2 4        + 115+ 172+ 127+ 177+ 152+ 217+ 179+ 220+ 187+ 208+ 196+ 181
39  7   6 3 4        + 200+ 166+ 207+ 149+ 221+ 126+ 228+ 119+ 250+ 103+ 263+  90
39  7   6 4 4        + 263+  90+ 289+  79+ 300+  64+ 319+  39+ 342+  11+ 374-  20
39  7   7 1 4751028  9002FT  +   0+ 127+  32+ 160+  53+ 195+  79+ 200+ 100+ 204
39  7   7 2 4        + 115+ 170+ 127+ 180+ 152+ 218+ 179+ 220+ 196+ 179+ 221+ 126
39  7   7 3 4        + 247+ 105+ 261+  92+ 269+  76+ 288+  62+ 300+  53+ 346+  16
39  7   7 4 4        + 370-   4+ 385-  24
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61

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59  7   H 1  475112A   9002FT  +    0+ 12A+  32+ 159+  53+ 196+  79+ 203+ 100+ 208
59  7   H 2 4            + 115+ 173+ 127+ 176+ 152+ 219+ 179+ 219+ 196+ 183+ 216+ 146
59  7   H 3 4            + 229+ 121+ 25A+ 114+ 285+  82+ 300+  66+ 333+  34+ 364+   0
59  7   H 4 4            + 397-  24
59  7   9 1  376010S   13002FT  +    0+ 126+  32+ 155+  53+ 191+  79+ 207+ 100+ 203
59  7   9 2 3            + 115+ 173+ 127+ 177+ 152+ 216+ 179+ 221+ 196+ 182+ 221+ 131
59  7   9 3 3            + 247+ 116+ 275+  89+ 300+  62+ 329+  40+ 371-   5+ 391-  35
59  7  10 1  376051I   11002FT  +    0+ 12A+  25+ 151+  50+ 186+  75+ 197+ 100+ 210
59  7  10 2 5            + 116+ 174+ 125+ 174+ 137+ 187+ 150+ 211+ 154+ 219+ 169+ 212
59  7  10 3 5            + 175+ 215+ 182+ 221+ 191+ 207+ 200+ 182+ 210+ 157+ 221+ 145
59  7  10 4 5            + 225+ 135+ 229+ 126+ 250+ 119+ 275+  93+ 300+  71+ 325+  45
59  7  10 5 5            + 350+  23+ 375-  11+ 380+  21
59  7  11 1  576040b   17002FT  +    0+ 127+  19+ 147+  25+ 149+  50+ 183+  55+ 198
59  7  11 2 5            +  75+ 198+ 100+ 208+ 114+ 176+ 135+ 189+ 150+ 214+ 153+ 220
59  7  11 3 5            + 172+ 214+ 180+ 220+ 186+ 212+ 191+ 205+ 200+ 179+ 212+ 152
59  7  11 4 5            + 220+ 146+ 230+ 123+ 250+ 117+ 275+  91+ 300+  62+ 325+  43
59  7  11 5 5            + 350+  22+ 365+   9+ 375+   0+ 400-  17+ 405+  21
59  7  12 1  376040A   10002FT  +    0+ 12A+  50+ 187+ 100+ 208+ 117+ 173+ 150+ 217
59  7  12 2 3            + 178+ 221+ 213+ 152+ 226+ 127+ 250+ 116+ 300+  57+ 350+  16
59  7  12 3 3            + 400-  24
59  7  13 1  476070T   14002FT  +    0+ 127+  25+ 146+  54+ 196+  75+ 205+ 100+ 197
59  7  13 2 4            + 118+ 172+ 152+ 217+ 165+ 214+ 179+ 221+ 200+ 179+ 213+ 150
59  7  13 3 4            + 230+ 123+ 256+ 110+ 275+  79+ 300+  57+ 323+  43+ 350+  10
59  7  13 4 4            + 375-  14+ 390-  24
59  7  14 1  476092T   14002FT  +    0+ 129+  25+ 145+  50+ 180+  75+ 203+ 100+ 196
59  7  14 2 4            + 113+ 173+ 135+ 182+ 150+ 219+ 170+ 214+ 181+ 222+ 200+ 171
59  7  14 3 4            + 215+ 154+ 229+ 125+ 251+ 114+ 856+  92+ 275+  68+ 287+  62
59  7  14 4 4            + 300+  47+ 319+  24+ 344+   3+ 369-  22
59  7  15 1  476121S   12002FT  +    0+ 12A+  25+ 145+  50+ 182+  75+ 207+ 100+ 199
59  7  15 2 4            + 125+ 177+ 150+ 219+ 175+ 219+ 800+ 172+ 217+ 150+ 224+ 140
59  7  15 3 4            + 248+ 113+ 257+  83+ 286+  69+ 300+  57+ 315+  39+ 340+  24
59  7  15 4 4            + 365+   8+ 390-  16+ 400-  29
59  8   1 1  375010b   13002FT  +    0+ 120+  50+ 130+ 100+ 159+ 126+ 177+ 152+ 199
59  8   1 2 3            + 167+ 217+ 183+ 214+ 190+ 222+ 200+ 174+ 210+ 132+ 233+ 108
59  8   1 3 3            + 264+  89+ 300+  44+ 313+  30+ 358-  20
59  8   2 1  375030S   13002FT  +    0+ 120+  50+ 131+ 100+ 160+ 126+ 177+ 152+ 200
59  8   2 2 3            + 167+ 218+ 183+ 211+ 190+ 221+ 200+ 175+ 210+ 132+ 233+ 106
59  8   2 3 3            + 252+  89+ 272+  67+ 300+  52+ 344+  10+ 367-  20
59  8   3 1  475040A   13002FT  +    0+ 119+  50+ 129+ 100+ 158+ 126+ 178+ 152+ 201
59  8   3 2 4            + 167+ 218+ 183+ 210+ 190+ 219+ 200+ 167+ 210+ 142+ 215+ 133
59  8   3 3 4            + 226+ 115+ 249+  97+ 277+  66+ 300+  54+ 319+  33+ 349+   5
59  8   3 4 4            + 375-  20
59  8   4 1  475060P   12002FT  +    0+ 120+  50+ 130+ 100+ 160+ 126+ 177+ 152+ 200
59  8   4 2 4            + 167+ 220+ 183+ 211+ 190+ 219+ 200+ 169+ 210+ 145+ 215+ 133
59  8   4 3 4            + 226+ 116+ 239+ 107+ 250+  98+ 266+  79+ 290+  61+ 300+  54
59  8   4 4 4            + 327+  30+ 349+   9+ 366-   5+ 381-  20
59  8   5 1  375070P   12002FT  +    0+ 119+  50+ 130+ 100+ 159+ 126+ 176+ 152+ 200
59  8   5 2 3            + 167+ 217+ 183+ 213+ 190+ 220+ 200+ 170+ 210+ 147+ 215+ 135
59  8   5 3 3            + 226+ 120+ 243+ 101+ 269+  76+ 300+  47+ 351+  27+ 358+   0
59  8   6 1  375090P   16002FT  +    0+ 120+  50+ 130+ 100+ 160+ 126+ 178+ 152+ 200
59  8   6 2 3            + 167+ 218+ 183+ 211+ 190+ 221+ 200+ 172+ 210+ 105+ 231+ 113
59  8   6 3 3            + 255+  95+ 287+  71+ 300+  59+ 317+  45+ 339+  22+ 383-  22
59  8   7 1  475102A    9002FT  +    0+ 120+  50+ 128+ 100+ 160+ 126+ 178+ 152+ 200
59  8   7 2 4            + 167+ 218+ 188+ 218+ 190+ 222+ 200+ 167+ 218+ 135+ 222+ 124
59  8   7 3 4            + 243+ 102+ 259+  90+ 270+  71+ 285+  58+ 300+  50+ 334+  30
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34  8  7  4  4          +  572-    6+ 368=   31
39  8  8  1  5751126   1000211  +    0+ 119+   50+ 129+ 100+ 159+ 126+ 177+ 152+ 149
39  8  8  2  3          + 107+ 217+ 189+ 221+ 200+ 169+ 218+ 133+ 232+ 116+ 260+ 101
39  8  8  3  5          + 300+  58+ 355+  10+ 393=   25
39  8  9  1  3700105   1300211  +    0+ 119+   50+ 129+ 100+ 159+ 126+ 176+ 152+ 202
39  8  9  2  5          + 107+ 217+ 189+ 216+ 200+ 171+ 222+ 126+ 239+ 114+ 265+  41
39  8  9  5  5          + 500+  60+ 332+  28+ 308=   13+ 390=   41
39  8 10  1  4700511   1100211  +    0+ 119+   25+ 123+   50+ 128+   75+ 134+ 100+ 155
39  8 10  2  4          + 125+ 174+ 150+ 192+ 168+ 216+ 175+ 217+ 189+ 209+ 194+ 218
39  8 10  5  4          + 200+ 196+ 210+ 160+ 225+ 132+ 250+ 111+ 275+  84+ 300+  61
39  8 10  4  4          + 325+  41+ 350+  23+ 375=   20
39  8 11  1  5700407   800211   +    0+ 120+   25+ 123+   50+ 129+   75+ 140+ 100+ 157
39  8 11  2  5          + 125+ 175+ 150+ 195+ 175+ 220+ 181+ 220+ 188+ 210+ 193+ 219
39  8 11  5  5          + 175+ 219+ 195+ 215+ 200+ 189+ 208+ 161+ 225+ 132+ 231+ 125
39  8 11  4  5          + 250+ 104+ 275+  82+ 300+  59+ 325+  39+ 357+  12+ 380=   0
39  8 11  5  5          + 395=   20
39  8 12  1  5700609   1000211  +    0+ 120+   50+ 130+ 100+ 158+ 150+ 196+ 175+ 218
39  8 12  2  5          + 184+ 212+ 190+ 218+ 210+ 148+ 240+ 113+ 300+  51+ 344+  17
39  8 12  3  5          + 400=   28
39  8 13  1  4700708   1000211  +    0+ 120+   25+ 122+   50+ 130+   75+ 140+ 100+ 158
39  8 13  2  4          + 125+ 175+ 150+ 196+ 166+ 218+ 175+ 220+ 185+ 211+ 200+ 183
39  8 13  3  4          + 225+ 124+ 250+ 103+ 285+  63+ 300+  42+ 325+  14+ 346=   7
39  8 13  4  4          + 375=   31
39  8 14  1  4700927   1400211  +    0+ 120+   25+ 121+   50+ 128+   75+ 140+ 100+ 158
39  8 14  2  4          + 125+ 175+ 150+ 197+ 175+ 222+ 185+ 209+ 192+ 221+ 200+ 177
39  8 14  3  4          + 219+ 134+ 230+ 117+ 239+  97+ 250+  82+ 275+  62+ 300+  36
39  8 14  4  4          + 325+   8+ 350=   21
39  8 15  1  4701216   900211   +    0+ 120+   25+ 121+   50+ 127+   75+ 140+ 100+ 158
39  8 15  2  4          + 125+ 175+ 150+ 196+ 175+ 219+ 191+ 221+ 200+ 179+ 224+ 136
39  8 15  3  4          + 250+  81+ 275+  70+ 300+  54+ 325+  33+ 350+  13+ 395=   5
39  8 15  4  4          + 390=   23
39  9  1  1  3750106   1300211  +    0+ 121+   50+ 133+  79+ 149+ 100+ 147+ 127+ 159
39  9  1  2  3          + 150+ 176+ 173+ 227+ 190+ 204+ 200+ 174+ 222+ 130+ 259+  98
39  9  1  3  3          + 242+  55+ 300+  48+ 317+  32+ 362=   23
39  9  2  1  3750303   1300211  +    0+ 120+   50+ 134+  79+ 147+ 100+ 148+ 127+ 161
39  9  2  2  3          + 150+ 178+ 173+ 228+ 191+ 196+ 200+ 169+ 218+ 125+ 245+ 103
39  9  2  3  3          + 204+  74+ 277+  61+ 300+  46+ 322+  29+ 339+   8+ 363=   20
39  9  3  1  4750428   1300211  +    0+ 120+   50+ 133+  79+ 147+ 100+ 146+ 127+ 158
39  9  3  2  4          + 150+ 176+ 173+ 229+ 182+ 215+ 191+ 198+ 200+ 170+ 206+ 151
39  9  3  3  4          + 210+ 145+ 217+ 127+ 235+ 115+ 254+  96+ 277+  85+ 300+  65
39  9  3  4  4          + 321+  38+ 350=   1+ 376=   20
39  9  4  1  5750802   1300211  +    0+ 120+   50+ 134+  79+ 146+ 100+ 166+ 127+ 158
39  9  4  2  5          + 150+ 175+ 173+ 226+ 182+ 217+ 191+ 199+ 200+ 174+ 206+ 155
39  9  4  3  5          + 210+ 145+ 217+ 130+ 228+ 114+ 242+ 109+ 264+  82+ 275+  76
39  9  4  4  5          + 242+  60+ 300+  53+ 309+  47+ 326+  28+ 353+   8+ 369+   0
39  9  4  5  5          + 385=   20
39  9  5  1  4750702   1200211  +    0+ 120+   50+ 133+  79+ 150+ 100+ 143+ 127+ 157
39  9  5  2  4          + 150+ 175+ 173+ 226+ 182+ 221+ 191+ 203+ 200+ 174+ 206+ 159
39  9  5  3  4          + 210+ 148+ 217+ 133+ 230+ 120+ 256+ 106+ 286+  74+ 300+  63
39  9  5  4  4          + 332+  38+ 353+  12+ 370=   5
39  9  6  1  4750909   1600211  +    0+ 121+   50+ 133+  79+ 147+ 100+ 145+ 127+ 159
39  9  6  2  4          + 150+ 177+ 173+ 227+ 182+ 213+ 191+ 196+ 200+ 167+ 210+ 143
39  9  6  3  4          + 222+ 124+ 240+ 114+ 264+  91+ 279+  80+ 300+  54+ 329+  32
39  9  6  4  4          + 355+   5+ 384=   25
39  9  7  1  4751028   900211   +    0+ 120+   50+ 134+  79+ 149+ 100+ 151+ 127+ 160
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63

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39   9    7  2  u        +  150+ 177+ 173+ 231+ 190+ 201+ 200+ 167+ 222+ 125+ 234+ 118
39   9    7  3  u        +  250+ 104+ 261+  92+ 276+  66+ 300+  46+ 340+  25+ 369+   2
39   9    7  4  u        +  387-  21
39   9    8  1  3751126  11002FT  +    0+ 120+  50+ 133+  79+ 147+ 100+ 148+ 127+ 158
39   9    8  2  3        +  150+ 175+ 173+ 227+ 190+ 199+ 200+ 168+ 222+ 126+ 257+ 100
39   9    8  3  3        +  289+  82+ 300+  71+ 345+  19+ 383-  23
39   9    9  1  3760105  13002FT  +    0+ 120+  50+ 133+  79+ 145+ 100+ 148+ 127+ 158
39   9    9  2  3        +  150+ 175+ 173+ 229+ 190+ 199+ 200+ 169+ 222+ 125+ 248+ 103
39   9    9  3  3        +  267+  85+ 294+  72+ 300+  65+ 330+  29+ 365+   5+ 391-  51
39   9   10  1  3760311  12002FT  +    0+ 121+  25+ 126+  50+ 135+  62+ 141+  66+ 150
39   9   10  2  3        +   75+ 151+  81+ 148+ 100+ 147+ 116+ 158+ 125+ 158+ 150+ 174
39   9   10  3  5        +  175+ 225+ 176+ 226+ 178+ 226+ 192+ 204+ 200+ 180+ 213+ 145
39   9   10  4  5        +  225+ 120+ 250+ 103+ 275+  82+ 300+  61+ 325+  37+ 350+  17
39   9   10  5  5        +  375-  10+ 392-  36
39   9   11  1  4760407  8002FT  +    0+ 121+  25+ 126+  50+ 133+  62+ 140+  72+ 155
39   9   11  2  u        +   82+ 149+ 100+ 148+ 125+ 159+ 150+ 175+ 155+ 183+ 177+ 227
39   9   11  3  u        +  179+ 226+ 196+ 187+ 200+ 181+ 213+ 146+ 226+ 126+ 250+ 105
39   9   11  4  u        +  300+  60+ 325+  41+ 338+  34+ 375-   1+ 399-  23
39   9   12  1  3760609  11002FT  +    0+ 121+  50+ 133+ 100+ 147+ 127+ 157+ 173+ 226
39   9   12  2  3        +  200+ 162+ 219+ 132+ 236+ 111+ 250+  90+ 300+  48+ 334+  17
39   9   12  3  3        +  350-   1+ 385-  27
39   9   13  1  3760708  11002FT  +    0+ 120+  85+ 125+  50+ 133+  75+ 152+ 100+ 149
39   9   13  2  3        +  125+ 159+ 150+ 175+ 176+ 225+ 200+ 175+ 219+ 130+ 245+ 104
39   9   13  3  3        +  265+  78+ 279+  66+ 300+  27+ 323-   1+ 345+  21+ 360-  33
39   9   14  1  3760927  15002FT  +    0+ 121+  85+ 126+  50+ 134+  75+ 189+ 100+ 146
39   9   14  2  3        +  125+ 160+ 150+ 176+ 175+ 233+ 200+ 177+ 221+ 131+ 246+  86
39   9   14  3  3        +  250+  75+ 275+  63+ 300+  36+ 325+   8+ 350-  13+ 375-  29
39   9   15  1  4761216  9002FT  +    0+ 120+  85+ 126+  50+ 133+  75+ 150+ 100+ 146
39   9   15  2  u        +  125+ 158+ 150+ 175+ 175+ 229+ 197+ 189+ 222+ 137+ 230+ 122
39   9   15  3  u        +  250+  84+ 275+  68+ 300+  57+ 325+  33+ 350+  16+ 375-   2
39   9   15  4  u        +  400-  21
39  10    1  1  3750106  14002FT  +    0+ 130+  50+ 133+ 100+ 143+ 124+ 157+ 145+ 198
39  10    1  2  3        +  150+ 216+ 177+ 202+ 200+ 189+ 818+ 140+ 231+ 113+ 272+  89
39  10    1  3  3        +  287+  65+ 300+  49+ 321+  31+ 371-  24
39  10    2  1  4750303  13002FT  +    0+ 131+  50+ 134+ 100+ 145+ 124+ 161+ 145+ 203
39  10    2  2  u        +  156+ 214+ 177+ 200+ 195+ 191+ 200+ 169+ 218+ 127+ 232+ 107
39  10    2  3  u        +  251+  92+ 258+  82+ 273+  60+ 288+  50+ 300+  40+ 326+  23
39  10    2  4  u        +  361-  20
39  10    3  1  3750428  13002FT  +    0+ 129+  50+ 133+ 100+ 144+ 124+ 158+ 145+ 201
39  10    3  2  3        +  156+ 214+ 177+ 201+ 195+ 190+ 200+ 182+ 212+ 148+ 221+ 123
39  10    3  3  3        +  233+ 102+ 259+  81+ 300+  56+ 318+  37+ 358+   1+ 379-  20
39  10    4  1  4750602  13002FT  +    0+ 131+  50+ 133+ 100+ 144+ 124+ 158+ 145+ 199
39  10    4  2  u        +  156+ 216+ 177+ 200+ 195+ 189+ 200+ 178+ 212+ 146+ 221+ 123
39  10    4  3  u        +  232+ 103+ 258+  85+ 282+  66+ 300+  54+ 327+  37+ 344+  17
39  10    4  4  u        +  358+   4+ 383-  20
39  10    5  1  3750702  12002FT  +    0+ 131+  50+ 133+ 100+ 145+ 124+ 160+ 145+ 199
39  10    5  2  3        +  156+ 217+ 177+ 201+ 195+ 190+ 200+ 182+ 212+ 150+ 221+ 126
39  10    5  3  3        +  237+ 107+ 262+  86+ 300+  54+ 337+  23+ 362+   0
39  10    6  1  3750909  9002FT  +    0+ 130+  50+ 133+ 100+ 145+ 124+ 161+ 145+ 201
39  10    6  2  3        +  156+ 215+ 177+ 201+ 195+ 190+ 200+ 176+ 220+ 125+ 233+ 109
39  10    6  3  3        +  255+  99+ 284+  78+ 300+  60+ 326+  37+ 350+  11+ 382-  27
39  10    7  1  3751028  10002FT  +    0+ 131+  50+ 135+ 100+ 145+ 124+ 160+ 145+ 197
39  10    7  2  3        +  156+ 214+ 177+ 200+ 200+ 173+ 218+ 133+ 233+ 110+ 252+  98
39  10    7  3  3        +  265+  85+ 273+  67+ 300+  44+ 346+  22+ 370-   4+ 397-  31
39  10    8  1  3751126  11002FT  +    0+ 130+  50+ 133+ 100+ 144+ 124+ 160+ 145+ 202
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39 10    8 2  5        +  150+ 214+  177+ 200+ 195+ 190+ 218+ 132+ 232+ 117+ 258+ 110
39 10    8 3  3        +  285+  83+  300+  69+ 345+  19+ 382-  28
39 10    9 1 3760105  10002FT   +    0+ 130+  50+ 134+ 100+ 148+ 124+ 165+ 145+ 203
39 10    9 2  3        +  156+ 213+  177+ 199+ 195+ 190+ 218+ 131+ 254+ 112+ 288+  69
39 10    9 3  3        +  300+  56+  334+  23+ 372-  13+ 392-  36
39 10   10 1 4760311  12002FT   +    0+ 131+  25+ 132+  50+ 134+  75+ 143+ 100+ 146
39 10   10 2  4        +  125+ 154+  150+ 205+ 158+ 216+ 175+ 208+ 200+ 190+ 206+ 167
39 10   10 3  4        +  212+ 162+  225+ 130+ 232+ 121+ 255+ 113+ 275+  89+ 300+  64
39 10   10 4  4        +  325+  39+  350+  14+ 375-  14+ 380-  20
39 10   11 1 3760407   9002FT   +    0+ 131+  25+ 132+  50+ 133+  75+ 142+ 100+ 144
39 10   11 2  3        +  130+ 164+  158+ 216+ 178+ 202+ 200+ 190+ 207+ 166+ 211+ 163
39 10   11 3  3        +  231+ 123+  250+ 117+ 275+  91+ 300+  58+ 344+  25+ 400+  26
39 10   12 1 3760609  11002FT   +    0+ 133+  50+ 133+ 100+ 144+ 128+ 163+ 156+ 215
39 10   12 2  3        +  180+ 184+  196+ 191+ 223+ 123+ 248+ 114+ 300+  49+ 341+  11
39 10   12 3  3        +  540-  32
39 10   13 1 4760708  11002FT   +    0+ 131+  85+ 133+  50+ 134+  75+ 143+ 100+ 145
39 10   13 2  4        +  125+ 154+  150+ 209+ 156+ 217+ 175+ 204+ 200+ 181+ 208+ 164
39 10   13 3  4        +  229+ 123+  249+ 114+ 274+  76+ 279+  98+ 300+  25+ 326-   4
39 10   13 4  4        +  350+  25
39 10   14 1 4760927  15002FT   +    0+ 132+  25+ 131+  50+ 134+  75+ 143+ 100+ 145
39 10   14 2  4        +  125+ 160+  150+ 210+ 165+ 214+ 175+ 204+ 195+ 188+ 200+ 175
39 10   14 3  4        +  215+ 156+  225+ 132+ 239+ 117+ 247+  91+ 272+  67+ 297+  35
39 10   14 4  4        +  300+  30+  322+   6+ 347-  13+ 372-  28
39 10   15 1 4761216   9002FT   +    0+ 131+  25+ 131+  50+ 133+  75+ 142+ 100+ 143
39 10   15 2  4        +  125+ 158+  150+ 208+ 175+ 204+ 198+ 188+ 204+ 166+ 207+ 172
39 10   15 3  4        +  236+ 110+  254+  80+ 275+  65+ 300+  46+ 325+  28+ 350+  12
39 10   15 4  4        +  375-   4+  400-  80
39 68   16 1 7770728  10000FT   +  120-  76+ 140-  65+ 160-  64+ 180-  23+ 200-  80
39 68   16 2  7        +  220- 123+  260- 184+ 300- 201+ 340- 209+ 380+ 234+ 420- 260
39 68   16 3  7        +  400- 272+  500- 296+ 540- 317+ 580- 353+ 620- 360+ 660- 304
39 68   16 4  7        +  700- 349+  740- 338+ 780- 335+ 820- 338+ 860- 345+ 900- 351
39 68   16 5  7        +  940- 360+  980- 370+1020- 375+1060- 387+1100- 399+1140- 410
39 68   16 6  7        + 1180- 425+ 1220- 438+1260- 444+1300- 492+1340- 457+1580- 460
39 68   16 7  7        + 1420- 460+ 1460- 477+1500- 480+1540- 485+1580- 480+1620- 492
39 68   17 1 7770811  12000FT   +  120-  76+ 140-  64+ 180-  64+ 180-  21+ 200-  77
39 68   17 2  7        +  220- 123+  260- 183+ 300- 199+ 340- 202+ 380- 214+ 420- 253
39 68   17 3  7        +  460- 265+  500- 276+ 540- 314+ 580- 348+ 620- 362+ 660- 362
39 68   17 4  7        +  700- 356+  740- 344+ 780- 345+ 820- 342+ 860- 341+ 900- 344
39 68   17 5  7        +  940- 352+  980- 361+1020- 571+1060- 581+1100- 390+1140- 404
39 68   17 6  7        + 1180- 421+ 1220- 435+1260- 440+1300- 447+1340- 448+1380- 458
39 68   17 7  7        + 1420- 465+ 1460- 470+1500- 475+1540- 480+1580- 485+1620- 486
39 68   18 1 9771021  14300FT   +  120-  76+ 140-  64+ 180-  62+ 180-  21+ 200-  76
39 68   18 2  9        +  220- 126+  260- 174+ 300- 194+ 340- 214+ 380- 251+ 420- 275
39 68   18 3  9        +  460- 298+  500- 351+ 540- 354+ 580- 364+ 620- 362+ 660- 359
39 68   18 4  9        +  700- 354+  740- 346+ 780- 345+ 820- 340+ 860- 340+ 900- 346
39 68   18 5  9        +  940- 361+  980- 378+1020- 389+1060- 404+1100- 414+1140- 423
39 68   18 6  9        + 1180- 433+ 1220- 444+1260- 457+1300- 458+1340- 472+1580- 476
39 68   18 7  9        + 1420- 500+ 1460- 490+1500- 497+1540- 512+1580- 509+1620- 524
39 68   18 8  9        + 1660- 520+ 1700- 529+1740- 531+1780- 540+1820- 536+1860- 540
39 68   18 9  9        + 1900- 541+ 1940- 547
39 68   19 1 9771121   8150FT   +  120-  74+ 140-  65+ 160-  62+ 180-  20+ 200-  78
39 68   19 2  9        +  220- 124+  260- 174+ 300- 204+ 340- 231+ 380- 275+ 420- 272
39 68   19 3  9        +  460- 276+  500- 281+ 540- 298+ 580- 324+ 620- 339+ 660- 377
39 68   19 4  9        +  700- 405+  740- 414+ 780- 420+ 820- 425+ 860- 420+ 900- 420
39 68   19 5  9        +  940- 414+  980- 409+1020- 400+1060- 393+1100- 383+1140- 400
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39 6A  19 6 9         +1180= 4n2+1220= 424+1260= 447+1300= 466+134n= 476+1380= 4A3
39 6A  19 7 9         +1u2o= 4A7+1460= 491+1500= 494+1540= 492+158n= 496+1620= 495
39 6A  19 A 9         +16n0= 493+17un= 497+174n= 498+1780= 504+1A2n= 505+1A60= 507
39 6A  19 9 9         +190n= 5n7+194n= 5n2
39 6A  20 1 97A0117   145nDF1  + 12n=   75+ 14n=  63+ 16n=  62+ 18n=  22+ 200=   79
39 6A  20 2 9         + 22n= 131+ 26n= 1A1+ 300= 202+ 340= 221+ 38n= 261+ 420= 3n5
39 6A  20 3 9         + 460= 32u+ 50n= 319+ 54n= 315+ 5A0= 310+ 62n= 308+ 660= 310
39 6A  20 4 9         + 70n= 353+ 74n= 4n7+ 78n= 431+ A20= 430+ 86n= 434+ 900= 441
39 6A  20 5 9         + 94n= 436+ 9A0= 439+1020= 446+1060= 442+1100= 437+114n= 440
39 6A  20 6 9         +11A0= 4u4+122n= 4u9+126n= 450+1300= 456+134n= 469+1380= 476
39 6A  20 7 9         +1u2u= 4A3+146n= 4A5+1500= 489+1540= 496+158n= 505+1620= 529
39 6A  20 A 9         +16n0= 529+1700= 52A+174n= 530+1780= 529+182n= 535+1860= 524
39 6A  20 9 9         +190n= 517+194n= 511
39 6A  21 1 97A0224   1n15DF1  + 12n=   76+ 14n=  61+ 16n=  63+ 18n=  22+ 200=   Ao
39 6A  21 2 9         + 22n= 128+ 26n= 189+ 300= 188+ 340= 222+ 38n= 256+ 420= 304
39 6A  21 3 9         + 460= 311+ 500= 310+ 54n= 313+ 5A0= 314+ 62n= 311+ 660= 317
39 6A  21 4 9         + 70n= 331+ 74n= 369+ 78n= 3A5+ A20= 417+ 86n= 417+ 900= 419
39 6A  21 5 9         + 94n= 425+ 980= 420+1020= 420+1060= 420+1100= 426+114n= 431
39 6A  21 6 9         +11A0= 430+1220= 435+126n= 441+1300= 450+134n= 460+1380= 476
39 6A  21 7 9         +1420= 4A1+1460= 489+1500= 493+1540= 504+158n= 510+1620= 515
39 6A  21 A 9         +16n0= 520+1700= 525+174n= 530+1780= 530+1A2n= 534+1860= 534
39 6A  21 9 9         +190u= 512+1940= 52A
39 6A  22 1 97A0411   945DF1   + 12n=   77+ 14n=  63+ 16n=  65+ 18n=  A0+ 200=   A0
39 6A  22 2 9         + 22n= 129+ 26n= 178+ 300= 183+ 340= 214+ 38n= 240+ 420= 290
39 6A  22 3 9         + 460= 3n7+ 500= 305+ 54n= 303+ 5A0= 309+ 62n= 311+ 660= 318
39 6A  22 4 9         + 70n= 329+ 74n= 381+ 78n= 410+ A20= 420+ 86n= 419+ 900= 417
39 6A  22 5 9         + 94n= 415+ 980= 416+1020= 414+1060= 419+110n= 415+114n= 415
39 6A  22 6 9         +11A0= 423+1220= 431+126n= 440+1300= 4u0+134n= 460+1380= 467
39 6A  22 7 9         +1020= 472+146n= 479+150n= 482+1540= 4A3+158n= 484+1620= 4A6
39 6A  22 A 9         +16n0= 4A5+17nn= 4A9+174n= 493+1780= 497+1A2n= 494+1A60= 496
39 6A  22 9 9         +19nn= 497+194n= 49A
39 6A  23 1 97A0524   10n0DF1  + 12n=   77+ 14n=  63+ 16n=  60+ 18n=  A0+ 200=   81
39 6A  23 2 9         + 22n= 13n+ 26n= 17n+ 300= 199+ 340= 212+ 38n= 243+ 420= 292
39 6A  23 3 9         + 460= 291+ 500= 292+ 54n= 296+ 5A0= 299+ 62n= 308+ 660= 321
39 6A  23 4 9         + 70n= 367+ 74n= 3A3+ 78n= 400+ A20= 412+ 86n= 418+ 900= 420
39 6A  23 5 9         + 94n= 421+ 980= 42n+1020= 418+1060= 416+110n= 417+114n= 415
39 6A  23 6 9         +11A0= 41/+1220= 422+126n= 430+1300= 440+134n= 4A7+1380= 455
39 6A  23 7 9         +1u20= 455+146n= 47A+1500= 490+1540= 490+158n= 508+1620= 52n
39 6A  23 A 9         +16n0= 525+1700= 54n+174n= 540+1780= 550+1A2n= 55n+1860= 550
39 6A  23 9 9         +190n= 55n+194n= 54n+196n= 540
39 6A  24 1 97A0717   1330DF1  + 12n=   7A+ 14n=  64+ 16n=  62+ 18n=  A0+ 200=   80
39 6A  24 2 9         + 22n= 124+ 26n= 17n+ 300= 193+ 340= 210+ 38n= 247+ 420= 273
39 6A  24 3 9         + 460= 271+ 50n= 2An+ 54n= 288+ 5A0= 294+ 62n= 310+ 660= 320
39 6A  24 4 9         + 70n= 344+ 74n= 367+ 78n= 389+ A20= 408+ 86n= 413+ 900= 420
39 6A  24 5 9         + 94n= 42n+ 9A0= 41A+1020= 412+1060= 412+1100= 406+114n= 406
39 6A  24 6 9         +11A0= 41n+1220= 415+134n= 422+1300= 430+134n= 480+1380= 449
39 6A  24 7 9         +1420= 462+146n= 47n+1500= 4A0+1540= 491+158n= 500+1620= 510
39 6A  24 A 9         +16n0= 510+1700= 525+174n= 529+1780= 530+1A2n= 537+1A60= 536
39 6A  24 9 9         +190n= 515+1940= 531
39 6A  25 1 97A0A23   145nDF1  + 12n=   7A+ 14n=  65+ 16n=  62+ 18n=  22+ 200=   79
39 6A  25 2 9         + 22n= 132+ 26n= 171+ 3nn= 192+ 340= 208+ 38n= 234+ 420= 253
39 6A  25 3 9         + u6n= 272+ 50n= 27u+ 54n= 277+ 5A0= 2A7+ 62n= 291+ 660= 319
39 6A  25 4 9         + 70n= 33A+ 74n= 363+ 78n= 389+ A20= 413+ 86n= 417+ 900= 423
39 6A  25 5 9         + 94n= 421+ 9Ho= 42n+10An= 412+1060= 41n+110n= 408+1140= 406
39 6A  25 6 9         +11Hn= 41n+1220= 415+126n= 422+1300= 42n+134n= 440+13An= 455
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39 68  25 7 9      +1120= 474+1460= 469+1500= 472+1540= 490+1580= 495+1620= 510
39 68  25 8 9      +1601= 511+1700= 516+1740= 539+1760= 532+1820= 536+1860= 540
39 68  25 9 9      +1940= 530+1940= 534
39 68  26 1 9781010  1500UPT  + 120=  78+ 140=  63+ 160=  60+ 180=  20+ 200=  79
39 68  26 2 9      + 220= 122+ 260= 169+ 300= 180+ 340= 215+ 380= 262+ 420= 290
39 68  26 3 9      + 400= 303+ 500= 302+ 540= 289+ 580= 288+ 620= 299+ 660= 300
39 68  26 4 9      + 700= 319+ 740= 321+ 780= 342+ 820= 367+ 860= 391+ 900= 399
39 68  26 5 9      + 940= 400+ 980= 399+1020= 390+1060= 397+1100= 397+1140= 401
39 68  26 6 9      +1180= 409+1220= 418+1260= 423+1300= 432+1340= 402+1380= 450
39 68  26 7 9      +1420= 454+1460= 469+1500= 480+1540= 487+1580= 490+1620= 502
39 68  26 8 9      +1660= 511+1700= 519+1740= 520+1780= 523+1820= 526+1860= 530
39 68  26 9 9      +1940= 523+1940= 533
39 68  27 1 9781121  1405UPT  + 120=  79+ 140=  63+ 160=  62+ 180=  20+ 200=  75
39 68  27 2 9      + 220= 125+ 260= 160+ 300= 196+ 340= 230+ 380= 256+ 420= 280
39 68  27 3 9      + 400= 315+ 500= 312+ 540= 330+ 580= 312+ 620= 343+ 660= 360
39 68  27 4 9      + 700= 362+ 740= 353+ 780= 339+ 820= 343+ 860= 357+ 900= 368
39 68  27 5 9      + 940= 389+ 980= 390+1020= 392+1060= 403+1100= 407+1140= 413
39 68  27 6 9      +1180= 421+1220= 439+1260= 439+1300= 442+1340= 447+1380= 458
39 68  27 7 9      +1420= 475+1460= 477+1500= 483+1540= 495+1580= 505+1620= 504
39 68  27 8 9      +1660= 527+1700= 518+1740= 514+1780= 520+1820= 526+1860= 521
39 68  27 9 9      +1940= 554+1940= 530
39 68  28 1 9790010  1100UPT  + 120=  78+ 140=  63+ 160=  62+ 180=  21+ 200=  79
39 68  28 2 9      + 220= 154+ 260= 164+ 300= 225+ 340= 246+ 380= 254+ 420= 260
39 68  28 3 9      + 400= 267+ 500= 284+ 540= 333+ 580= 353+ 620= 366+ 660= 366
39 68  28 4 9      + 700= 367+ 740= 369+ 780= 369+ 820= 365+ 860= 371+ 900= 372
39 68  28 5 9      + 940= 380+ 980= 385+1020= 400+1060= 403+1100= 405+1140= 415
39 68  28 6 9      +1180= 420+1220= 429+1260= 439+1300= 441+1340= 447+1380= 454
39 68  28 7 9      +1420= 464+1460= 471+1500= 480+1540= 485+1580= 493+1620= 500
39 68  28 8 9      +1660= 503+1700= 507+1740= 510+1780= 514+1820= 515+1860= 519
39 68  28 9 9      +1900= 520+1940= 517
39 68  29 1 9790220  805UPT  + 120=  77+ 140=  63+ 160=  63+ 180=  21+ 200=  79
39 68  29 2 9      + 220= 124+ 260= 170+ 300= 218+ 340= 249+ 380= 300+ 420= 292
39 68  29 3 9      + 400= 241+ 500= 288+ 540= 294+ 580= 313+ 620= 337+ 660= 357
39 68  29 4 9      + 700= 370+ 740= 390+ 780= 410+ 820= 409+ 860= 417+ 900= 433
39 68  29 5 9      + 940= 414+ 980= 399+1020= 402+1060= 385+1100= 366+1140= 377
39 68  29 6 9      +1180= 397+1220= 406+1260= 424+1300= 443+1340= 460+1580= 470
39 68  29 7 9      +1420= 445+1460= 489+1500= 505+1540= 502+1580= 510+1620= 517
39 68  29 8 9      +1660= 523+1700= 530+1740= 527+1780= 542+1820= 550+1860= 537
39 68  29 9 9      +1900= 550+1940= 540
39 68  30 1 9790322  1515UPT  + 120=  76+ 140=  63+ 160=  63+ 180=  23+ 200=  79
39 68  30 2 9      + 220= 125+ 260= 175+ 300= 218+ 340= 232+ 380= 282+ 420= 287
39 68  30 3 9      + 400= 295+ 500= 290+ 540= 292+ 580= 290+ 620= 308+ 660= 332
39 68  30 4 9      + 700= 313+ 740= 369+ 780= 388+ 820= 400+ 860= 423+ 900= 409
39 68  30 5 9      + 940= 417+ 980= 422+1020= 421+1060= 410+1100= 395+1140= 389
39 68  30 6 9      +1180= 388+1220= 399+1260= 417+1300= 432+1340= 454+1380= 463
39 68  30 7 9      +1420= 470+1460= 480+1500= 487+1540= 495+1580= 506+1620= 510
39 68  30 8 9      +1660= 515+1700= 527+1740= 528+1780= 530+1820= 531+1860= 530
39 68  30 9 9      +1900= 534+1940= 530
39 69  10 1 7770727  1400UPT  + 120=  76+ 140=  71+ 160=  69+ 180=  44+ 200=  71
39 69  10 2 7      + 220= 120+ 260= 178+ 300= 200+ 340= 205+ 380= 228+ 420= 250
39 69  10 3 7      + 400= 273+ 500= 290+ 540= 322+ 580= 362+ 620= 385+ 660= 394
39 69  10 4 7      + 700= 384+ 740= 367+ 780= 350+ 820= 342+ 860= 366+ 900= 356
39 69  10 5 7      + 940= 360+ 980= 372+1020= 380+1060= 392+1100= 400+1140= 402
39 69  10 6 7      +1180= 427+1220= 440+1260= 446+1300= 456+1340= 460+1380= 466
39 69  10 7 7      +1420= 470+1460= 480+1500= 485+1540= 487+1580= 488+1620= 497
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39 69  17  1  777.-11   1100FT  + 120-   75+ 140-   70+ 100-   68+ 180-   42+ 200-   73
39 69  17  2  7          + 220-  121+ 260-  183+ 300-  196+ 340-  201+ 380-  223+ 420-  254
39 69  17  3  7          + 460-  268+ 500-  279+ 540-  317+ 580-  359+ 620-  383+ 660-  391
39 69  17  4  7          + 70 -  384+ 740-  368+ 780-  360+ 820-  350+ 860-  347+ 900-  350
39 69  17  5  7          + 940-  357+ 980-  365+1020-  378+1060-  390+1100-  399+1140-  410
39 69  17  6  7          +1180-  425+1220-  437+1260-  447+1300-  455+1340-  457+1380-  463
39 69  17  7  7          +1420-  470+1460-  476+1500-  480+1540-  482+1580-  488+1620-  491
39 69  18  1  9771.20   1500FT  + 120-   76+ 140-   69+ 100-   68+ 180-   41+ 200-   72
39 69  18  2  9          + 220-  120+ 260-  122+ 300-  196+ 340-  222+ 380-  250+ 420-  272
39 69  18  3  9          + 460-  310+ 500-  344+ 540-  370+ 580-  375+ 620-  384+ 660-  376
39 69  18  4  9          + 700-  373+ 740-  364+ 780-  354+ 820-  350+ 860-  352+ 900-  363
39 69  18  5  9          + 940-  380+ 980-  395+1080-  409+1060-  422+1100-  431+1140-  442
39 69  18  6  9          +1180-  450+1220-  458+1260-  471+1300-  478+1340-  490+1380-  491
39 69  18  7  9          +1420-  499+1460-  506+1500-  510+1540-  518+1580-  518+1620-  526
39 69  18  8  9          +1660-  530+1700-  537+1740-  533+1780-  546+1820-  539+1860-  546
39 69  18  9  9          +1900-  519+1940-  532
39 69  19  1  9771121   7150FT  + 120-   76+ 140-   69+ 100-   67+ 180-   81+ 200-   72
39 69  19  2  9          + 220-  121+ 260-  174+ 300-  203+ 340-  232+ 380-  279+ 420-  276
39 69  19  3  9          + 460-  277+ 500-  284+ 540-  296+ 580-  323+ 620-  339+ 660-  367
39 69  19  4  9          + 700-  398+ 740-  416+ 780-  422+ 820-  424+ 860-  425+ 900-  424
39 69  19  5  9          + 940-  416+ 980-  409+1080-  400+1060-  382+1100-  372+1140-  375
39 69  19  6  9          +1180-  393+1220-  409+1260-  430+1300-  451+1340-  467+1380-  478
39 69  19  7  9          +1420-  486+1460-  491+1500-  493+1540-  498+1580-  502+1620-  500
39 69  19  8  9          +1660-  505+1700-  499+1740-  504+1780-  512+1820-  514+1860-  514
39 69  19  9  9          +1900-  513+1940-  505
39 69  20  1  9780117  13300FT  + 120-   76+ 140-   68+ 100-   68+ 180-   40+ 200-   75
39 69  20  2  9          + 220-  130+ 260-  181+ 300-  203+ 340-  225+ 380-  264+ 420-  317
39 69  20  3  9          + 460-  301+ 500-  316+ 540-  319+ 580-  317+ 620-  310+ 660-  310
39 69  20  4  9          + 700-  350+ 740-  390+ 780-  430+ 820-  432+ 860-  436+ 900-  437
39 69  20  5  9          + 940-  437+ 980-  438+1080-  436+1060-  424+1100-  429+1140-  451
39 69  20  6  9          +1180-  430+1220-  435+1260-  434+1300-  446+1340-  458+1380-  472
39 69  20  7  9          +1420-  484+1460-  495+1500-  505+1540-  516+1580-  510+1620-  529
39 69  20  8  9          +1660-  534+1700-  536+1740-  534+1780-  534+1820-  530+1860-  524
39 69  20  9  9          +1900-  520+1940-  511
39 69  21  1  9780224   9300FT  + 120-   76+ 140-   69+ 100-   70+ 180-   40+ 200-   72
39 69  21  2  9          + 220-  130+ 260-  178+ 300-  190+ 340-  224+ 380-  259+ 420-  302
39 69  21  3  9          + 460-  311+ 500-  316+ 540-  321+ 580-  319+ 620-  311+ 660-  313
39 69  21  4  9          + 700-  346+ 740-  385+ 780-  409+ 820-  423+ 860-  421+ 900-  430
39 69  21  5  9          + 940-  431+ 980-  433+1080-  434+1060-  436+1100-  440+1140-  446
39 69  21  6  9          +1180-  446+1220-  448+1260-  449+1300-  448+1340-  466+1380-  478
39 69  21  7  9          +1420-  484+1460-  491+1500-  500+1540-  507+1580-  512+1620-  518
39 69  21  8  9          +1660-  522+1700-  527+1740-  530+1780-  533+1820-  535+1860-  535
39 69  21  9  9          +1900-  535+1940-  530
39 69  22  1  9780311   8300FT  + 120-   77+ 140-   69+ 100-   70+ 180-   81+ 200-   74
39 69  22  2  9          + 220-  123+ 260-  176+ 300-  184+ 340-  214+ 380-  284+ 420-  294
39 69  22  3  9          + 460-  306+ 500-  314+ 540-  310+ 580-  315+ 620-  315+ 660-  317
39 69  22  4  9          + 700-  323+ 740-  377+ 780-  419+ 820-  423+ 860-  427+ 900-  423
39 69  22  5  9          + 940-  414+ 980-  420+1080-  420+1060-  425+1100-  420+1140-  425
39 69  22  6  9          +1180-  431+1220-  436+1260-  443+1300-  450+1340-  468+1380-  471
39 69  22  7  9          +1420-  476+1460-  487+1500-  489+1540-  490+1580-  499+1620-  492
39 69  22  8  9          +1660-  492+1700-  492+1740-  499+1780-  503+1820-  501+1860-  503
39 69  22  9  9          +1900-  501+1940-  501
39 69  23  1  9780524   9150FT  + 120-   77+ 140-   69+ 100-   70+ 180-   40+ 200-   75
39 69  23  2  9          + 220-  128+ 260-  170+ 300-  198+ 340-  210+ 380-  242+ 420-  285
39 69  23  3  9          + 460-  290+ 500-  292+ 540-  290+ 580-  290+ 620-  303+ 660-  326
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39 69   25 4 9        +  700- 355+ 740- 393+ 780- 410+ 820- 425+ 860- 431+ 900+ 435
39 69   23 5 9        +  940- 435+ 980- 437+1020- 433+1060- 430+1100- 430+1140- 428
39 69   21 6 9        + 1180- 429+1220- 432+1260- 441+1300- 450+1340- 460+1380- 470
37 69   21 7 9        + 1420- 480+1460- 495+1500- 503+1540- 510+1580- 520+1620- 525
39 69   21 8 9        + 1660- 535+1700- 542+1740- 540+1780- 545+1820- 551+1860- 552
39 69   25 9 9        + 1900- 553+1940- 547+1962- 540
39 69   21 1 9780717  1030UFT  +  120-  77+ 140-  69+ 160-  69+ 180-  41+ 200-  73
39 69   21 2 9        +  220- 130+ 260- 171+ 300- 195+ 340- 204+ 380- 267+ 420- 270
39 69   21 3 9        +  460- 278+ 500- 290+ 540- 292+ 580- 311+ 620- 325+ 660- 356
39 69   21 4 9        +  700- 379+ 740- 392+ 780- 406+ 820- 425+ 860- 429+ 900- 432
39 69   21 5 9        +  940- 435+ 980- 432+1020- 428+1060- 425+1100- 423+1140- 420
39 69   21 6 9        + 1180- 420+1220- 424+1260- 431+1300- 440+1340- 450+1380- 461
39 69   21 7 9        + 1420- 471+1460- 485+1500- 495+1540- 503+1580- 508+1620- 515
39 69   21 8 9        + 1660- 523+1700- 528+1740- 533+1780- 538+1820- 539+1860- 539
39 69   21 9 9        + 1900- 540+1940- 532
39 69   25 1 9781823  1300UFT  +  120-  69+ 140-  70+ 160-  71+ 180-  41+ 200-  75
39 69   25 2 9        +  220- 131+ 260- 171+ 300- 194+ 340- 206+ 380- 233+ 420- 251
39 69   25 3 9        +  460- 272+ 500- 279+ 540- 281+ 580- 291+ 620- 290+ 660- 320
39 69   23 4 9        +  700- 343+ 740- 377+ 780- 409+ 820- 425+ 860- 428+ 900- 432
39 69   25 5 9        +  940- 438+ 980- 433+1020- 429+1060- 425+1100- 426+1140- 420
39 69   25 6 9        + 1180- 420+1220- 425+1260- 431+1300- 443+1340- 451+1380- 462
39 69   25 7 9        + 1420- 472+1460- 489+1500- 500+1540- 508+1580- 513+1620- 522
39 69   25 8 9        + 1660- 525+1700- 518+1740- 543+1780- 541+1820- 550+1860- 550
39 69   25 9 9        + 1900- 551+1940- 542
39 69   25 1 9741816  1215UFT  +  120-  78+ 140-  70+ 160-  70+ 180-  40+ 200-  73
39 69   25 2 9        +  220- 125+ 260- 171+ 300- 182+ 340- 216+ 380- 261+ 420- 300
39 69   25 3 9        +  460- 298+ 500- 300+ 540- 292+ 580- 292+ 620- 292+ 660- 295
39 69   25 4 9        +  700- 308+ 740- 329+ 780- 356+ 820- 376+ 860- 410+ 900- 423
39 69   25 5 9        +  940- 430+ 980- 425+1020- 420+1060- 427+1100- 420+1140- 421
39 69   25 6 9        + 1180- 429+1220- 430+1260- 438+1300- 446+1340- 450+1380- 460
39 69   25 7 9        + 1420- 470+1460- 480+1500- 490+1540- 500+1580- 503+1620- 512
39 69   25 8 9        + 1660- 520+1700- 523+1740- 525+1780- 531+1820- 533+1860- 537
39 69   25 9 9        + 1900- 538+1940- 534
39 69   27 1 9741121  1300UFT  +  120-  79+ 140-  70+ 160-  67+ 180-  40+ 200-  74
39 69   27 2 9        +  220- 125+ 260- 167+ 300- 177+ 340- 247+ 380- 280+ 420- 294
39 69   27 3 9        +  460- 298+ 500- 318+ 540- 323+ 580- 357+ 620- 377+ 660- 374
39 69   27 4 9        +  700- 373+ 740- 376+ 780- 368+ 820- 355+ 860- 368+ 900- 380
39 69   27 5 9        +  940- 385+ 980- 390+1020- 405+1060- 416+1100- 412+1140- 420
39 69   27 6 9        + 1180- 423+1220- 429+1260- 437+1300- 450+1340- 462+1380- 482
39 69   27 7 9        + 1420- 473+1460- 481+1500- 471+1540- 497+1580- 502+1620- 511
39 69   27 8 9        + 1660- 515+1700- 520+1740- 525+1780- 530+1820- 534+1860- 537
39 69   27 9 9        + 1900- 510+1940- 530
39 69   24 1 9720116  945UFT   +  120-  77+ 140-  70+ 160-  69+ 180-  40+ 200-  73
39 69   24 2 9        +  220- 127+ 260- 169+ 300- 223+ 340- 250+ 380- 256+ 420- 262
39 69   24 3 9        +  460- 249+ 500- 289+ 540- 325+ 580- 353+ 620- 369+ 660- 363
39 69   24 4 9        +  700- 355+ 740- 355+ 780- 355+ 820- 355+ 860- 366+ 900- 378
39 69   24 5 9        +  940- 384+ 980- 390+1020- 400+1060- 408+1100- 413+1140- 416
39 69   24 6 9        + 1180- 427+1220- 431+1260- 438+1300- 448+1340- 450+1380- 458
39 69   24 7 9        + 1420- 467+1460- 477+1500- 482+1540- 490+1580- 494+1620- 505
39 69   24 8 9        + 1660- 510+1700- 510+1740- 514+1780- 518+1820- 520+1860- 520
39 69   24 9 9        + 1900- 522+1940- 519
39 69   23 1 9720320  740UFT   +  120-  77+ 140-  70+ 160-  70+ 180-  40+ 200-  72
39 69   23 2 9        +  220- 130+ 260- 173+ 300- 212+ 340- 245+ 380- 290+ 420- 294
39 69   23 3 9        +  460- 286+ 500- 287+ 540- 290+ 580- 310+ 620- 337+ 660- 362
39 69   23 4 9        +  700- 398+ 740- 413+ 780- 420+ 820- 423+ 860- 440+ 900- 445
```

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39 69  29 5 9        +  940= 459+ 980= 439+1020= 480+1060= 399+1100= 390+1140= 388
39 69  29 6 9        +1180= 390+1220= 416+1260= 435+1300= 450+1340= 465+1380= 480
39 69  29 7 9        +1420= 480+1460= 490+1500= 500+1540= 508+1580= 513+1620= 519
39 69  29 8 9        +1660= 519+1700= 530+1740= 549+1780= 539+1820= 537+1860= 535
39 69  29 9 9        +1900= 537+1940= 530
39 69  30 1 9790322  1030DFT  +  120=  77+ 140=  70+ 160=  70+ 180=  39+ 200=  75
39 69  30 2 9        +  220= 130+ 260= 174+ 300= 209+ 340= 230+ 380= 257+ 420= 296
39 69  30 3 9        +  400= 290+ 500= 293+ 540= 299+ 580= 308+ 620= 332+ 660= 337
39 69  30 4 9        +  700= 380+ 740= 409+ 780= 440+ 820= 430+ 860= 436+ 900= 434
39 69  30 5 9        +  940= 459+ 980= 430+1020= 416+1060= 410+1100= 401+1140= 382
39 69  30 6 9        +1100= 379+1220= 399+1200= 418+1300= 438+1340= 455+1380= 465
39 69  31 7 9        +1420= 479+1460= 488+1500= 492+1540= 495+1580= 507+1620= 512
39 69  31 8 9        +1660= 520+1700= 531+1740= 526+1780= 540+1820= 538+1860= 530
39 69  31 9 9        +1900= 524+1940= 528
-199999999
```

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APPENDIX G

SAMPLE FINAL DATA FILE, FDIT1

These data were created by the FDIT2 program from the sample input data in Appendix F. Because data at profile lines 68 and 69 were collected to a different vertical datum (pier deck) than at other profile lines, a correction of 25.5 feet was made to each vertical coordinate at lines 68 and 69. These data are in the card image format to make them more legible. These data, in magnetic media format, were used to produce all the analysis module sample outputs used this series of reports, except those otherwise identified.

```
00   1    1 69   30 5001FT MSL75U106 1000790322 1515DARE COUNTY, N. C.
39   1    11750106 1000 11= 20            +    0+ 142+   16+ 196+   29+ 246+   41+ 191
39   1    12+  58+ 134+  75+ 113+  88+  95+ 100+  82+ 114+   71+ 165+   15+ 196=  20
39   1    21750303 1100 10= 20            +    0+ 142+   16+ 197+   29+ 247+   41+ 187
39   1    22+  59+ 113+ 100+  88+ 105+  82+ 113+  67+ 155+   31+ 200=  20
39   1    31750428 1100 16= 20            +    0+ 143+   16+ 197+   29+ 247+   32+ 243
39   1    32+  37+ 205+  44+ 173+  57+ 138+  73+ 114+  91+  92+ 100+   88+ 124+  79
39   1    33+ 141+  65+ 161+  40+ 182+  13+ 200=  15+ 207=  20
39   1    41750002 1100 17= 21            +    0+ 142+   16+ 196+   29+ 246+   32+ 240
39   1    42+  57+ 209+  44+ 177+  57+ 135+  75+ 110+  90+  94+ 100+   89+ 126+  69
39   1    43+ 150+  54+ 166+  46+ 188+  24+ 200=   2+ 205=   7+ 225+  21
39   1    51750702 1000 13=  7            +    0+ 142+   16+ 197+   29+ 247+   32+ 242
39   1    52+  43+ 186+  55+ 143+  78+ 112+ 100+ 103+ 119+   89+ 148+   67+ 175+  38
39   1    53+ 200+  16+ 219=  7
39   1    61750909 1500 16= 21            +    0+ 142+   16+ 196+   26+ 239+   29+ 246
39   1    62+  32+ 245+  37+ 210+  52+ 148+  59+ 133+  80+ 111+ 100+ 105+ 126+ 101
39   1    63+ 134+  84+ 158+  69+ 186+  38+ 200+  21+ 236=  21
39   1    71751028  700 16= 20            +    0+ 142+   16+ 197+   29+ 247+   41+ 187
39   1    72+  58+ 135+  77+ 118+ 100+ 105+ 116+ 105+ 127+   90+ 157+   44+ 191+  12
39   1    73+ 200+   6+ 222=   3+ 243=   6+ 257=  11+ 279=  20
39   1    81751125 1100 10= 22            +    0+ 144+   16+ 192+   29+ 248+   41+ 192
39   1    82+  58+ 137+  88+ 107+ 100+ 101+ 150+  76+ 200+  12+ 230=  22
39   1    91760105 1100 11= 20            +    0+ 142+   16+ 194+   29+ 248+   41+ 196
39   1    92+  62+ 130+  83+ 118+ 100+ 103+ 116+  89+ 155+   61+ 200+  13+ 229=  20
39   1    101760311  800 16= 29            +    0+ 143+   26+ 235+   27+ 247+   30+ 248
39   1    102+  33+ 245+  37+ 206+  50+ 157+  60+ 131+  75+ 116+ 100+ 100+ 125+  69
39   1    103+ 150+  43+ 175+  22+ 200+   4+ 225=  14+ 243=  29
39   1    111760406 1400 19= 23            +    0+ 143+   25+ 228+   28+ 247+   31+ 249
39   1    112+  33+ 245+  38+ 211+  50+ 162+  62+ 131+  75+ 117+ 100+ 104+ 115+  82
39   1    113+ 128+  75+ 150+  55+ 175+  34+ 189+  22+ 200+   15+ 213+   0+ 225=  13
39   1    114+ 233=  23
39   1    121760008 1300  8= 25            +    0+ 143+   29+ 251+   60+ 130+ 100+  91
39   1    122+ 150+  57+ 180+  23+ 200=  16+ 232=  25
39   1    131760707 1200 12= 35            +    0+ 144+   25+ 233+   30+ 250+   50+ 163
39   1    132+  75+ 118+ 100+  94+ 125+  75+ 150+  59+ 175+   35+ 200+   10+ 225=  19
39   1    133+ 250=  35
39   1    141760927  900 14= 20            +    0+ 143+   25+ 234+   30+ 249+   60+ 156
39   1    142+  75+ 117+ 100+  94+ 125+  82+ 150+  68+ 166+   46+ 175+   28+ 200+   5
39   1    143+ 201=   1+ 211=   7+ 215=  20
39   1    151761215  900 13= 25            +    0+ 144+   25+ 242+   29+ 251+   50+ 155
39   1    152+  75+ 118+ 100+  96+ 104+  84+ 135+  53+ 150+   27+ 175+   14+ 200=   4
39   1    153+ 225=  18+ 235=  25
39   2    11750106 1000 12= 23            +    0+ 119+   32+ 132+   48+ 170+   61+ 209
39   2    12+  67+ 201+  78+ 157+  93+ 119+ 184+ 102+ 166+   70+ 200+   42+ 215+  21
39   2    15+ 250=  23
39   2    21750303 1100 13= 21            +    0+ 118+   32+ 133+   48+ 170+   61+ 208
39   2    22+  67+ 199+  78+ 154+  93+ 119+ 100+ 113+ 135+   94+ 146+   72+ 179+  41
39   2    23+ 200+  26+ 229=  21
39   2    31750428 1100 16= 24            +    0+ 119+   32+ 131+   48+ 175+   61+ 208
39   2    32+  64+ 195+  78+ 163+  91+ 124+ 100+ 115+ 119+   91+ 138+   78+ 192+  69
39   2    33+ 175+  60+ 189+  45+ 200+  34+ 224+   8+ 244=  24
39   2    41750002 1100 17= 20            +    0+ 119+   32+ 131+   48+ 175+   61+ 209
39   2    42+  68+ 196+  78+ 161+  91+ 123+ 100+ 115+ 114+   95+ 130+   87+ 156+  75
39   2    43+ 181+  59+ 188+  48+ 200+  34+ 216+  16+ 237=   8+ 254=  20
39   2    51750702 1000 12=  5            +    0+ 118+   32+ 131+   48+ 171+   61+ 208
```

```
39  2   52+  68+ 195+   78+ 160+   91+ 130+ 100+ 117+ 135+   78+ 174+   47+ 200+   27
39  2   53+ 228-    5
39  2  61750909 1500 14-  32              +   0+ 118+   32+ 131+   48+ 173+   61+ 206
39  2   62+  68+ 199+   78+ 162+   91+ 124+ 100+ 115+ 125+   94+ 156+   65+ 188+   32
39  2   63+ 200+   21+ 229-    8+ 244-   32
39  2  71751028  700 15-  20              +   0+ 118+   32+ 132+   48+ 173+   61+ 208
39  2   72+  67+ 197+   78+ 159+   93+ 127+ 100+ 117+ 112+   97+ 113+   91+ 137+   64
39  2   73+ 170+   33+ 200+    7+ 215-    8+ 224+   20
39  2  81751125 1100 12-  33              +   0+ 119+   32+ 131+   48+ 173+   61+ 207
39  2   82+  67+ 196+   78+ 159+   93+ 126+ 100+ 118+ 137+   66+ 162+   56+ 200+    8
39  2   83+ 230-   33
39  8  91760105 1100 12-  81              +   0+ 120+   32+ 131+   48+ 170+   61+ 204
39  2   92+  67+ 203+   78+ 163+   93+ 117+ 100+ 105+ 132+   75+ 175+   35+ 200+    1
39  8   93+ 221+   21
39  2 101760311  900 17-  85              +   0+ 119+   17+ 124+   22+ 131+   25+ 130
39  2  102+  33+ 134+   50+ 177+   61+ 209+   66+ 203+   75+ 185+   84+ 136+ 100+ 107
39  2  103+ 125+   82+ 150+   59+ 175+   38+ 200+   13+ 225-   18+ 240-   25
39  2 111760406 1000 19-  21              +   0+ 119+   17+ 122+   23+ 130+   31+ 129
39  2  112+  37+ 134+   63+ 209+   68+ 202+   70+ 195+   75+ 174+   91+ 122+ 100+ 108
39  2  113+ 125+   81+ 131+   76+ 150+   54+ 160+   43+ 175+   29+ 200+    8+ 225-    8
39  2  114+ 237-   21
39  2 121760608 1400 10-  22              +   0+ 119+   30+ 130+   50+ 179+   62+ 204
39  2  122+  97+ 112+ 107+   90+ 157+   47+ 184+   21+ 207+    4+ 229-   22
39  2 131760707 1200 12-  24              +   0+ 119+   25+ 130+   34+ 134+   50+ 178
39  2  132+  62+ 209+   75+ 172+ 100+ 106+ 185+   74+ 150+   52+ 175+   29+ 200+    8
39  2  133+ 232-   24
39  2 141760927 1600 13-  21              +   0+ 119+   25+ 130+   50+ 176+   60+ 204
39  2  142+  75+ 162+   95+ 115+ 100+ 101+ 125+   70+ 150+   65+ 175+   25+ 200-    3
39  2  143+ 210-   12+ 218-   21
39  2 151761215  900 12-  29              +   0+ 120+   25+ 131+   50+ 183+   61+ 208
39  2  152+  75+ 169+ 100+ 102+ 125+   53+ 150+   24+ 175+   19+ 200+    5+ 225-   12
39  2  153+ 250-   29
39  3  11750106 1100 14-  20              +   0+ 130+   20+ 126+   37+ 150+   50+ 185
39  3   12+  79+ 172+ 100+ 174+ 115+ 164+ 139+ 121+ 168+ 110+ 200+   96+ 223+   64
39  3   13+ 250+   35+ 275+    8+ 300-   20
39  3  21750303 1100 16-  86              +   0+ 130+   20+ 126+   37+ 153+   50+ 185
39  3   22+  68+ 182+   79+ 172+ 100+ 175+ 115+ 163+ 139+ 118+ 150+ 113+ 183+ 105
39  3   23+ 191+   82+ 200+   72+ 213+   53+ 247+   16+ 285-   26
39  3  31750428 1100 18-  21              +   0+ 130+   20+ 126+   37+ 153+   50+ 185
39  3   32+  68+ 181+   79+ 172+ 100+ 174+ 115+ 165+ 126+ 145+ 136+ 121+ 155+ 115
39  3   33+ 172+ 110+ 192+   80+ 200+   77+ 224+   58+ 249+   30+ 268+    9+ 294-   21
39  3  41750602 1100 19-  20              +   0+ 130+   20+ 126+   37+ 153+   50+ 185
39  3   42+  68+ 181+   79+ 171+ 100+ 174+ 115+ 166+ 126+ 147+ 136+ 121+ 149+ 113
39  3   43+ 168+ 113+ 182+   94+ 200+   82+ 223+   75+ 238+   56+ 253+   31+ 280-    5
39  3   44+ 298-   20
39  3  51750702 1100 17-   8              +   0+ 130+   20+ 126+   37+ 152+   50+ 185
39  3   52+  68+ 181+   79+ 172+ 100+ 175+ 115+ 166+ 126+ 149+ 136+ 123+ 162+ 115
39  3   53+ 185+ 103+ 200+   91+ 241+   57+ 260+   31+ 286+    6+ 295-    8
39  3  61750909 1600 18-  34              +   0+ 129+   20+ 126+   37+ 151+   50+ 184
39  3   62+  68+ 181+   79+ 171+ 100+ 174+ 115+ 164+ 126+ 147+ 136+ 121+ 153+ 112
39  3   63+ 173+ 106+ 200+   92+ 231+   78+ 252+   43+ 281+    8+ 300-   16+ 308-   34
39  3  71751028  800 15-  20              +   0+ 130+   20+ 126+   37+ 152+   50+ 185
39  3   72+  79+ 171+ 100+ 175+ 115+ 165+ 139+ 118+ 176+ 109+ 200+ 103+ 213+ 102
39  3   73+ 230+   77+ 254+   44+ 289-    3+ 305-   20
39  3  81751126  700 13-  23              +   0+ 129+   20+ 126+   37+ 151+   50+ 187
```

```
19  5   82+   79+ 172+ 100+ 174+ 115+ 165+ 139+ 120+ 189+ 112+ 200+ 100+ 246+   54
19  5   83+ 292+    4+ 351-  23
19  5   91760105 1200 13-  20              +    0+ 130+  20+ 126+  37+ 152+  50+ 186
19  5   92+   79+ 172+ 100+ 175+ 115+ 166+ 139+ 120+ 168+ 114+ 200+ 100+ 228+   70
19  5   93+ 284-    2+ 302-  20
19  5  10176311  900 26-  26              +    0+ 130+  19+ 125+  25+ 131+  39+ 155
19  5  102+   50+ 186+  69+ 181+  75+ 175+  79+ 171+  84+ 176+  89+ 171+  97+ 179
19  5  103+ 100+ 177+ 125+ 157+ 127+ 151+ 131+ 136+ 135+ 127+ 150+ 116+ 175+ 114
19  5  104+ 191+ 109+ 200+  98+ 225+  72+ 244+  55+ 250+  46+ 275+  20+ 300-    8
19  5  105+ 319-  26
19  5  11176040n 1500 20-  22              +    0+ 129+  22+ 127+  25+ 130+  31+ 142
19  5  112+   57+ 149+  42+ 161+  49+ 185+  69+ 181+  80+ 172+  93+ 170+  98+ 178
19  5  114+ 100+ 175+ 108+ 176+ 118+ 164+ 126+ 156+ 136+ 126+ 150+ 117+ 175+ 114
19  5  114+ 190+ 108+ 200+  99+ 225+  71+ 250+  54+ 275+  32+ 300+   1+ 325-   17
19  5  115+ 329-  22
19  5  12176050n 1400 13-  20              +    0+ 129+  20+ 126+  52+ 183+  78+ 171
19  5  122+ 102+ 177+ 122+ 160+ 142+ 117+ 150+ 117+ 184+ 108+ 204+  81+ 250+   40
19  5  123+ 298-  14+ 303-  20
19  5  13176n707 1300 15-  23              +    0+ 130+  25+ 131+  50+ 186+  75+ 175
19  5  132+ 100+ 174+ 125+ 161+ 150+ 118+ 175+ 115+ 200+  94+ 225+  69+ 280+   51
19  5  133+ 275+  27+ 300+   1+ 316-  16+ 325+  23
19  5  14176n927 1100 16-  21              +    0+ 130+  25+ 130+  50+ 187+  75+ 174
19  5  142+   93+ 171+ 100+ 176+ 125+ 156+ 137+ 125+ 150+ 116+ 175+ 112+ 200+   94
19  5  143+ 225+  80+ 250+  40+ 275+  10+ 300+  13+ 310-  21
19  5  151761215  900 20-  23              +    0+ 129+  20+ 126+  50+ 187+  75+ 174
19  5  152+   94+ 173+ 100+ 177+ 125+ 157+ 132+ 140+ 150+ 116+ 175+ 111+ 197+   93
19  5  153+ 200+  71+ 225+  30+ 250+   8+ 275-   6+ 300-  18+ 309-  17+ 328-   18
19  5  154+ 350-  20+ 375+  23
19  4  11176010n 1100 15-  20              +    0+ 159+  27+ 164+  54+ 167+  71+ 197
19  4   12+   81+ 227+ 100+ 213+ 118+ 195+ 131+ 190+ 138+ 202+ 157+ 172+ 186+ 115
19  4   13+ 200+ 101+ 250+  51+ 291+  15+ 324-  20
19  4   21176030S 1200 17-  24              +    0+ 159+  27+ 164+  54+ 166+  71+ 197
19  4   22+   81+ 226+ 100+ 211+ 118+ 191+ 131+ 191+ 138+ 199+ 157+ 167+ 186+ 112
19  4   23+ 200+  98+ 223+  89+ 241+  72+ 287+  12+ 300-   3+ 310n-  24
19  4   31176042n 1200 18-  24              +    0+ 159+  27+ 164+  54+ 166+  71+ 199
19  4   32+   81+ 225+ 100+ 211+ 118+ 192+ 131+ 190+ 138+ 202+ 157+ 167+ 167+ 150
19  4   33+ 180+ 123+ 200+  84+ 229+  65+ 252+  44+ 277+  17+ 300-   9+ 312-   24
19  4   41176060n 1200 21+  20              +    0+ 158+  27+ 164+  54+ 165+  71+ 195
19  4   42+   81+ 225+ 100+ 212+ 118+ 192+ 131+ 189+ 138+ 202+ 157+ 166+ 167+ 153
19  4   43+ 180+ 125+ 188+ 109+ 200+  88+ 215+  79+ 234+  67+ 248+  54+ 265+   32
19  4   44+ 292+   7+ 296-   7+ 310-  20
19  4   51176070n 1100 16+   0              +    0+ 159+  27+ 165+  54+ 165+  71+ 195
19  4   52+   81+ 227+ 100+ 210+ 118+ 192+ 131+ 190+ 138+ 202+ 157+ 169+ 167+ 152
19  4   53+ 180+ 123+ 200+  91+ 240+  55+ 276+  19+ 295+   0
19  4   61176n909 1600 19-  23              +    0+ 158+  27+ 164+  54+ 164+  71+ 196
19  4   62+   81+ 225+ 100+ 211+ 118+ 192+ 131+ 191+ 138+ 202+ 157+ 168+ 167+ 150
19  4   63+ 180+ 121+ 190+ 106+ 200+  97+ 225+  72+ 239+  61+ 261+  38+ 300-    1
19  4   64+ 325-  23
19  4   71176102n  800 19-  23              +    0+ 158+  27+ 165+  54+ 165+  71+ 195
19  4   72+   81+ 226+ 100+ 211+ 118+ 191+ 131+ 189+ 138+ 202+ 165+ 155+ 179+ 123
19  4   73+ 200+  98+ 211+  91+ 241+  93+ 256+  73+ 284+  41+ 300+  24+ 328+    0
19  4   74+ 350-  23
19  4   81176112n  800 17-  45              +    0+ 158+  27+ 167+  54+ 164+  71+ 195
19  4   82+   81+ 226+ 100+ 210+ 118+ 191+ 131+ 190+ 138+ 201+ 165+ 154+ 179+ 124
19  4   83+ 200+ 107+ 244+  72+ 278+  40+ 300+  14+ 313-   2+ 342-   45
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39   u    91760105 1200 16-   20                •    n+ 158+   27+ 165+   54+ 166+   71+ 196
39   u    92+   81+ 227+ 100+ 211+ 118+ 192+ 131+ 190+ 138+ 201+ 169+ 157+ 179+ 125
39   u    93+ 200+ 107+ 250+  84+ 253+  63+ 300+   10+ 322-   20
39   u   101760311 1000 24-   25                •    n+ 158+   19+ 168+   25+ 167+   45+ 160
39   u   102+   50+ 163+  60+ 173+  67+ 184+  75+ 204+   81+ 226+ 100+ 213+ 125+ 189
39   u   103+ 131+ 189+ 134+ 192+ 139+ 201+ 150+ 180+ 175+ 139+ 181+ 125+ 200+ 109
39   u   104+ 225+  97+ 250+  77+ 275+  49+ 300+   25+ 325-    3+ 350-   25
39   u   111760406 1500 29-   21                •    n+ 159+   25+ 167+   43+ 158+   50+ 163
39   u   112+   55+ 166+  67+ 180+  75+ 205+  83+ 225+ 100+ 215+ 125+ 190+ 135+ 191
39   u   113+ 141+ 202+ 143+ 198+ 150+ 183+ 168+ 155+ 175+ 144+ 182+ 126+ 200+ 109
39   u   114+ 225+ 100+ 233+  93+ 241+  78+ 250+   67+ 263+   50+ 275+   39+ 282+   18
39   u   115+ 300+   10+ 313+   0+ 325-    9+ 338-   21
39   u   121760608 1500 14-   26                •    n+ 158+   50+ 163+   81+ 225+ 126+ 190
39   u   122+ 138+ 200+ 150+ 179+ 179+ 125+ 200+ 110+ 250+ 102+ 283+   57+ 300+   37
39   u   123+ 324+   0+ 350-   14+ 354-   26
39   u   131760707 1300 18-   20                •    0+ 159+   25+ 166+   50+ 162+   75+ 206
39   u   132+   85+ 225+ 100+ 212+ 125+ 189+ 138+ 201+ 150+ 178+ 175+ 136+ 200+ 108
39   u   133+ 225+ 100+ 250+  98+ 275+  65+ 300+   38+ 325+   16+ 350-    8+ 365+   20
39   u   141760927 1100 21-   21                •    0+ 158+   25+ 166+   50+ 164+   75+ 206
39   u   142+   82+ 226+ 100+ 212+ 125+ 190+ 139+ 201+ 155+ 172+ 175+ 137+ 200+ 108
39   u   143+ 225+ 102+ 250+  93+ 275+  81+ 278+   67+ 292+   46+ 300+   34+ 325+   12
39   u   144+ 347+   0+ 370-   12+ 385-   21
39   u   151761215 1000 17-   23                •    0+ 158+   25+ 168+   50+ 158+   82+ 225
39   u   152+ 100+ 216+ 125+ 191+ 144+ 200+ 165+ 166+ 185+ 131+ 200+ 112+ 225+ 104
39   u   153+ 241+ 100+ 266+  67+ 290+  38+ 300+   27+ 325+    3+ 350-   23
39   5    11750106 1200 16-   20                •    0+ 143+   18+ 160+   52+ 184+ 100+ 185
39   5    12+ 143+ 201+ 152+ 218+ 166+ 214+ 174+ 208+ 183+ 231+ 196+ 206+ 212+ 125
39   5    13+ 248+   96+ 263+  84+ 300+  46+ 332+   16+ 353-   20
39   5    21750503 1200 18-   20                •    0+ 144+   18+ 164+   52+ 183+ 100+ 193
39   5    22+ 121+ 192+ 143+ 209+ 152+ 222+ 166+ 207+ 174+ 213+ 183+ 229+ 196+ 185
39   5    23+ 212+ 126+ 232+ 105+ 248+  92+ 260+   73+ 300+   57+ 331+   19+ 358-   20
39   5    31750428 1200 21-   20                •    0+ 144+   18+ 162+   52+ 185+ 100+ 181
39   5    32+ 121+ 194+ 143+ 209+ 152+ 219+ 166+ 207+ 174+ 214+ 183+ 228+ 196+ 188
39   5    33+ 200+ 156+ 210+ 126+ 221+ 115+ 242+ 101+ 263+   87+ 284+   70+ 300+   57
39   5    34+ 327+   29+ 352+    5+ 372-   20
39   5    41750602 1200 21-   20                •    0+ 144+   18+ 163+   52+ 188+ 100+ 187
39   5    42+ 121+ 192+ 143+ 206+ 152+ 218+ 166+ 209+ 174+ 207+ 183+ 231+ 196+ 199
39   5    43+ 200+ 165+ 210+ 131+ 222+ 115+ 245+ 104+ 259+   91+ 278+   70+ 300+   51
39   5    44+ 316+   32+ 352-    7+ 369-   20
39   5    51750702 1100 18-   11                •    0+ 144+   18+ 160+   52+ 189+ 100+ 190
39   5    52+ 121+ 192+ 143+ 207+ 152+ 220+ 166+ 209+ 174+ 206+ 183+ 232+ 196+ 200
39   5    53+ 200+ 168+ 210+ 132+ 223+ 118+ 258+   91+ 300+   49+ 344+    9+ 360-   11
39   5    61750909 1600 21-   23                •    0+ 145+   18+ 164+   52+ 194+ 100+ 180
39   5    62+ 121+ 197+ 143+ 209+ 192+ 218+ 166+ 206+ 174+ 211+ 183+ 228+ 196+ 178
39   5    63+ 204+ 142+ 210+ 127+ 224+ 113+ 246+ 103+ 262+   94+ 280+   76+ 300+   57
39   5    64+ 332+   28+ 357+    2+ 379-   23
39   5    71751028  800 20-   38                •    0+ 145+   18+ 161+   52+ 188+ 100+ 200
39   5    72+ 143+ 214+ 152+ 222+ 166+ 206+ 174+ 212+ 183+ 227+ 196+ 175+ 212+ 125
39   5    73+ 238+ 107+ 259+  98+ 273+  91+ 294+   67+ 300+   60+ 326+   31+ 349+    5
39   5    74+ 367-   11+ 383-   38
39   5    81751126  800 16-   34                •    0+ 144+   18+ 162+   52+ 186+ 100+ 199
39   5    82+ 143+ 206+ 152+ 220+ 166+ 208+ 174+ 207+ 183+ 230+ 196+ 200+ 212+ 131
39   5    83+ 252+ 115+ 300+  65+ 333+  30+ 366+    4+ 391-   34
39   5    91760105 1200 17-   26                •    0+ 144+   18+ 162+   52+ 186+ 100+ 197
39   5    92+ 143+ 220+ 152+ 215+ 166+ 210+ 174+ 213+ 183+ 215+ 196+ 201+ 212+ 124
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39  5    93+ 220+ 118+ 246+ 112+ 284+  79+ 300+  93+ 341+  10+ 369-  26
39  5   101760311 1000 22-  21          +   0+ 148+  25+ 170+  50+ 186+ 100+ 189
39  5   102+ 125+ 193+ 150+ 219+ 163+ 212+ 175+ 209+ 182+ 233+ 188+ 225+ 196+ 201
39  5   103+ 200+ 180+ 212+ 132+ 225+ 171+ 250+ 115+ 257+ 106+ 275+  85+ 297+  59
39  5   104+ 300+  55+ 325+  30+ 350-   3+ 369-  21
39  5   111760406 1600 26-  25          +   0+ 148+  25+ 170+  50+ 184+  75+ 182
39  5   112+ 100+ 196+ 125+ 192+ 141+ 199+ 152+ 220+ 158+ 219+ 166+ 211+ 175+ 206
39  5   113+ 184+ 234+ 186+ 230+ 195+ 210+ 200+ 183+ 213+ 129+ 225+ 121+ 250+ 115
39  5   114+ 259+ 104+ 270+  79+ 287+  60+ 300+  37+ 314+  23+ 325+  14+ 350-   6
39  5   115+ 368-  25
39  5   121760608 1500 14-  22          +   0+ 148+  50+ 186+ 100+ 195+ 150+ 220
39  5   122+ 170+ 206+ 181+ 236+ 200+ 170+ 209+ 137+ 243+ 110+ 256+  84+ 300+  73
39  5   123+ 331+  46+ 350+  31+ 397-  22
39  5   131760707 1400 21-  22          +   0+ 152+  25+ 171+  50+ 186+  75+ 182
39  5   132+ 100+ 203+ 125+ 195+ 150+ 220+ 173+ 206+ 184+ 229+ 200+ 168+ 213+ 129
39  5   133+ 238+ 115+ 257+  83+ 275+  80+ 300+  71+ 321+  47+ 350+  48+ 375+  21
39  5   134+ 400+   2+ 417-  13+ 430-  22
39  5   141760927 1200 19-  24          +   0+ 154+  25+ 172+  50+ 187+  75+ 183
39  5   142+ 100+ 190+ 125+ 195+ 150+ 221+ 171+ 206+ 180+ 235+ 200+ 160+ 214+ 126
39  5   143+ 240+ 113+ 250+  90+ 275+  86+ 300+  68+ 320+  37+ 345+   9+ 370-   8
39  5   144+ 391-  24
39  5   151761215 1000 19-  19          +   0+ 154+  25+ 171+  50+ 186+  75+ 182
39  5   152+ 100+ 201+ 125+ 195+ 150+ 221+ 173+ 206+ 181+ 238+ 200+ 167+ 217+ 126
39  5   153+ 240+ 114+ 250+  98+ 279+  78+ 300+  45+ 325+  31+ 350+  12+ 375-   8
39  5   154+ 385-  19
39  6    11750106 1300 14-  22          +   0+ 120+  50+ 131+ 100+ 145+ 112+ 155
39  6    12+ 135+ 172+ 151+ 193+ 171+ 193+ 189+ 169+ 220+ 123+ 250+  90+ 300+  49
39  6    13+ 350+  25+ 358-  10+ 369-  22
39  6    21750303 1200 14-  22          +   0+ 120+  50+ 132+ 100+ 146+ 112+ 156
39  6    22+ 135+ 174+ 151+ 193+ 171+ 190+ 189+ 166+ 220+ 122+ 252+  86+ 269+  69
39  6    23+ 300+  52+ 342+  18+ 367-  22
39  6    31750428 1200 19-  20          +   0+ 121+  50+ 131+ 100+ 146+ 112+ 152
39  6    32+ 135+ 171+ 151+ 192+ 171+ 193+ 189+ 167+ 200+ 155+ 211+ 137+ 220+ 121
39  6    33+ 257+ 107+ 257+  95+ 284+  86+ 300+  68+ 314+  57+ 332+  36+ 364+   8
39  6    34+ 380-  20
39  6    41750602 1200 20-  24          +   0+ 120+  50+ 130+ 100+ 145+ 112+ 153
39  6    42+ 135+ 172+ 151+ 192+ 171+ 192+ 189+ 168+ 200+ 154+ 211+ 132+ 220+ 120
39  6    43+ 234+ 107+ 254+  95+ 273+  88+ 280+  73+ 300+  53+ 329+  34+ 348+  16
39  6    44+ 363+   2+ 390-  24
39  6    51750702 1100 16-   6          +   0+ 120+  50+ 130+ 100+ 145+ 112+ 156
39  6    52+ 135+ 171+ 151+ 193+ 171+ 192+ 189+ 168+ 200+ 154+ 211+ 134+ 220+ 121
39  6    53+ 236+ 105+ 268+  91+ 300+  61+ 337+  23+ 358-   6
39  6    61750909 1600 17-  20          +   0+ 120+  50+ 131+ 100+ 145+ 112+ 191
39  6    62+ 135+ 171+ 151+ 192+ 171+ 192+ 189+ 167+ 200+ 150+ 220+ 121+ 231+ 110
39  6    63+ 254+  95+ 281+  71+ 300+  54+ 322+  35+ 351+   6+ 374-  20
39  6    71751028  900 15-  36          +   0+ 121+  50+ 131+ 100+ 147+ 112+ 158
39  6    72+ 135+ 174+ 151+ 194+ 171+ 193+ 189+ 167+ 220+ 122+ 253+  95+ 276+  82
39  6    73+ 300+  61+ 330+  29+ 353+   4+ 383-  36
39  6    81751126  800 15-  30          +   0+ 121+  50+ 129+ 100+ 146+ 112+ 152
39  6    82+ 135+ 170+ 151+ 193+ 171+ 193+ 189+ 168+ 220+ 124+ 264+ 106+ 285+  73
39  6    83+ 300+  57+ 337+  22+ 350+   4+ 400-  30
39  6    91760105 1300 15-  33          +   0+ 121+  50+ 131+ 100+ 146+ 112+ 156
39  6    92+ 135+ 173+ 151+ 194+ 171+ 190+ 189+ 167+ 220+ 124+ 249+ 111+ 276+  83
39  6    93+ 300+  73+ 330+  34+ 362-   1+ 384-  33
39  6   101760311 1100 21-  22          +   0+ 120+  25+ 121+  50+ 131+  75+ 137
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39  6   102+ 100+ 146+ 125+ 162+ 150+ 190+ 161+ 192+ 173+ 192+ 175+ 190+ 192+ 167
39  6   103+ 198+ 161+ 200+ 150+ 225+ 123+ 250+ 113+ 275+  93+ 300+  77+ 325+  46
39  6   104+ 350+  23+ 375-  11+ 384-  22
39  6   111760400 1700 24-  23       .   0+ 121+  25+ 119+  50+ 131+  75+ 130
39  6   112+ 100+ 147+ 115+ 155+ 125+ 163+ 142+ 178+ 150+ 191+ 169+ 194+ 175+ 192
39  6   113+ 198+ 161+ 200+ 158+ 222+ 129+ 225+ 126+ 234+ 118+ 250+ 112+ 275+  95
39  6   114+ 291+  85+ 300+  65+ 325+  38+ 350+  14+ 375-   2+ 400-  23
39  6   121760604 1600 11-  21       .   0+ 120+  50+ 131+ 100+ 146+ 150+ 198
39  6   122+ 167+ 193+ 200+ 153+ 230+ 119+ 250+ 113+ 290+  63+ 378-  12+ 388-  21
39  6   131760707 1400 18-  27       .   0+ 120+  25+ 120+  50+ 128+  75+ 137
39  6   132+ 100+ 145+ 125+ 162+ 150+ 191+ 175+ 189+ 200+ 156+ 225+ 124+ 250+ 112
39  6   133+ 275+  77+ 300+  54+ 325+  39+ 339+  27+ 350+  16+ 375+   6+ 397-  27
39  6   141760927 1400 19-  21       .   0+ 120+  25+ 120+  50+ 130+  75+ 138
39  6   142+ 100+ 146+ 125+ 164+ 150+ 192+ 172+ 193+ 190+ 169+ 200+ 156+ 225+ 124
39  6   143+ 250+ 107+ 261+  80+ 275+  65+ 296+  60+ 300+  57+ 325+  26+ 390+   3
39  6   144+ 375-  21
39  6   151761215 1200 19-  20       .   0+ 121+  25+ 122+  50+ 131+  75+ 138
39  6   152+ 100+ 146+ 125+ 163+ 150+ 192+ 175+ 188+ 200+ 153+ 222+ 140+ 230+ 119
39  6   153+ 250+ 107+ 275+  78+ 300+  60+ 325+  35+ 350+  21+ 375+   2+ 392-  14
39  6   154+ 402-  20
39  7   11750106 1300 17-  26       .   0+ 127+  32+ 160+  53+ 195+  99+ 203
39  7   12+ 100+ 207+ 115+ 173+ 127+ 181+ 152+ 219+ 179+ 223+ 196+ 182+ 221+ 127
39  7   13+ 226+ 108+ 250+  78+ 284+  54+ 300+  43+ 317+  28+ 366-  26
39  7   21750303 1200 17-  19       .   0+ 127+  32+ 160+  53+ 108+  79+ 200
39  7   22+ 100+ 206+ 115+ 175+ 127+ 184+ 152+ 219+ 179+ 221+ 196+ 182+ 221+ 131
39  7   23+ 230+ 102+ 251+  81+ 278+  62+ 300+  52+ 330+  12+ 372-  19
39  7   31750428 1300 22-  20       .   0+ 128+  32+ 157+  53+ 108+  79+ 204
39  7   32+ 100+ 208+ 115+ 173+ 127+ 178+ 152+ 218+ 179+ 220+ 187+ 211+ 196+ 185
39  7   33+ 200+ 171+ 207+ 152+ 221+ 131+ 226+ 114+ 236+ 106+ 260+  98+ 284+  84
39  7   34+ 300+  70+ 315+  53+ 358+  11+ 380-  20
39  7   41750602 1200 24-  20       .   0+ 127+  32+ 159+  53+ 108+  79+ 208
39  7   42+ 100+ 204+ 115+ 173+ 127+ 178+ 152+ 219+ 179+ 222+ 187+ 210+ 196+ 182
39  7   43+ 200+ 167+ 207+ 150+ 221+ 129+ 226+ 113+ 234+ 106+ 262+  96+ 280+  76
39  7   44+ 300+  58+ 317+  49+ 329+  35+ 346+  12+ 362+   5+ 378-  20
39  7   51750702 1200 21-   7       .   0+ 127+  32+ 155+  53+ 196+  79+ 206
39  7   52+ 100+ 204+ 115+ 174+ 127+ 177+ 152+ 218+ 179+ 222+ 187+ 209+ 196+ 183
39  7   53+ 200+ 166+ 207+ 150+ 221+ 131+ 226+ 121+ 243+ 108+ 265+  87+ 300+  64
39  7   54+ 335+  19+ 355+  18+ 370-   7
39  7   61750909 1600 23-  20       .   0+ 128+  32+ 156+  53+ 196+  79+ 209
39  7   62+ 100+ 203+ 115+ 178+ 127+ 177+ 152+ 217+ 179+ 220+ 187+ 208+ 196+ 181
39  7   63+ 200+ 166+ 207+ 149+ 221+ 126+ 228+ 119+ 250+ 103+ 263+  90+ 265+  90
39  7   64+ 289+  79+ 300+  64+ 319+  39+ 342+  11+ 374-  20
39  7   71751026  900 19-  24       .   0+ 127+  32+ 160+  53+ 195+  79+ 200
39  7   72+ 100+ 204+ 115+ 176+ 127+ 180+ 152+ 218+ 179+ 220+ 196+ 179+ 231+ 126
39  7   73+ 247+ 105+ 261+  92+ 269+  76+ 288+  62+ 300+  53+ 346+  16+ 350-   9
39  7   74+ 385-  24
39  7   81751126  900 18-  29       .   0+ 128+  32+ 159+  53+ 196+  79+ 203
39  7   82+ 100+ 208+ 115+ 173+ 127+ 176+ 152+ 219+ 179+ 219+ 196+ 183+ 210+ 146
39  7   83+ 229+ 121+ 258+ 114+ 285+  82+ 300+  66+ 333+  34+ 364+   0+ 397-  29
39  7   91760105 1300 17-  35       .   0+ 126+  32+ 155+  53+ 191+  79+ 207
39  7   92+ 100+ 203+ 115+ 173+ 127+ 177+ 152+ 216+ 179+ 221+ 196+ 182+ 221+ 131
39  7   93+ 247+ 116+ 275+  89+ 300+  62+ 329+  40+ 371-   5+ 391-  35
39  7   101760311 1100 26-  21       .   0+ 128+  25+ 151+  50+ 186+  75+ 197
39  7   102+ 100+ 210+ 116+ 174+ 125+ 174+ 137+ 187+ 150+ 211+ 154+ 219+ 169+ 212
39  7   103+ 175+ 215+ 182+ 221+ 191+ 207+ 200+ 182+ 210+ 157+ 221+ 145+ 225+ 135
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39   7   104+ 229+ 126+ 250+ 119+ 275+  93+ 300+  71+ 325+  45+ 350+  23+ 375-  11
39   7   105+ 380-  21
39   7   111760406 1700 28-  21              +   0+ 127+  19+ 147+  25+ 149+  50+ 183
39   7   112+  55+ 198+  75+ 198+ 100+ 208+ 114+ 176+ 135+ 189+ 150+ 214+ 153+ 220
39   7   113+ 172+ 214+ 180+ 220+ 186+ 212+ 191+ 205+ 200+ 177+ 212+ 152+ 220+ 146
39   7   114+ 250+ 123+ 250+ 117+ 275+  91+ 300+  62+ 325+  43+ 350+  22+ 365+   9
39   7   115+ 375+   0+ 400-  17+ 405-  21
39   7   121760609 1000 12-  29              +   0+ 128+  50+ 187+ 100+ 208+ 117+ 173
39   7   122+ 150+ 217+ 178+ 221+ 213+ 152+ 226+ 127+ 250+ 116+ 300+  57+ 350+  16
39   7   123+ 400-  29
39   7   131760707 1400 19-  24              +   0+ 127+  25+ 146+  54+ 196+  75+ 205
39   7   132+ 100+ 197+ 118+ 172+ 152+ 217+ 165+ 214+ 179+ 221+ 200+ 175+ 213+ 150
39   7   133+ 250+ 123+ 256+ 110+ 275+  79+ 300+  57+ 323+  43+ 350+  10+ 375-  15
39   7   134+ 390-  24
39   7   141760327 1400 21-  22              +   0+ 129+  25+ 145+  50+ 180+  75+ 203
39   7   142+ 130+ 196+ 113+ 173+ 135+ 182+ 150+ 219+ 170+ 214+ 181+ 222+ 200+ 171
39   7   143+ 215+ 154+ 229+ 125+ 251+ 114+ 256+  92+ 275+  68+ 287+  62+ 300+  47
39   7   144+ 319+  24+ 344-   3+ 369-  22
39   7   151761215 1200 20-  29              +   0+ 128+  25+ 145+  50+ 182+  75+ 207
39   7   152+ 100+ 199+ 125+ 177+ 150+ 219+ 175+ 219+ 200+ 172+ 217+ 150+ 224+ 140
39   7   153+ 244+ 113+ 257+  83+ 286+  69+ 300+  57+ 315+  39+ 340+  24+ 365+   8
39   7   154+ 390-  16+ 400-  29
39   8   11750106 1300 15-  20              +   0+ 120+  50+ 130+ 100+ 159+ 126+ 177
39   8   12+ 152+ 199+ 167+ 217+ 183+ 214+ 190+ 222+ 200+ 174+ 218+ 132+ 233+ 108
39   8   13+ 264+  89+ 300+  44+ 313+  30+ 358-  20
39   8   21750303 1300 16-  20              +   0+ 120+  50+ 131+ 100+ 160+ 126+ 177
39   8   22+ 152+ 200+ 167+ 218+ 183+ 211+ 190+ 221+ 200+ 175+ 218+ 132+ 233+ 106
39   8   23+ 252+  89+ 272+  67+ 300+  52+ 344+  10+ 367-  20
39   8   31750428 1300 18-  20              +   0+ 119+  50+ 129+ 100+ 158+ 186+ 178
39   8   32+ 152+ 201+ 167+ 218+ 183+ 210+ 190+ 219+ 200+ 167+ 210+ 142+ 215+ 133
39   8   33+ 225+ 115+ 249+  97+ 277+  66+ 300+  54+ 119+  33+ 349+   5+ 375-  20
39   8   41750602 1200 21-  20              +   0+ 120+  50+ 130+ 100+ 160+ 186+ 177
39   8   42+ 152+ 200+ 167+ 220+ 183+ 211+ 190+ 219+ 200+ 169+ 210+ 149+ 215+ 133
39   8   43+ 228+ 116+ 239+ 107+ 250+  98+ 266+  79+ 290+  61+ 300+  54+ 327+  30
39   8   44+ 349+   9+ 366-   5+ 381-  20
39   8   51750702 1200 17+   0              +   0+ 119+  50+ 130+ 100+ 159+ 126+ 176
39   8   52+ 152+ 200+ 167+ 217+ 183+ 213+ 190+ 220+ 200+ 170+ 210+ 147+ 215+ 135
39   8   53+ 228+ 120+ 243+ 101+ 269+  76+ 300+  47+ 331+  27+ 358+   0
39   8   61750909 1600 17+  22              +   0+ 120+  50+ 130+ 100+ 160+ 126+ 178
39   8   62+ 152+ 200+ 167+ 218+ 183+ 211+ 190+ 221+ 200+ 172+ 210+ 145+ 231+ 113
39   8   63+ 255+  95+ 287+  71+ 300+  54+ 317+  45+ 339+  22+ 383-  22
39   8   71751028  900 19-  31              +   0+ 120+  50+ 128+ 100+ 160+ 126+ 178
39   8   72+ 152+ 200+ 167+ 218+ 188+ 218+ 190+ 222+ 200+ 167+ 218+ 133+ 222+ 124
39   8   73+ 243+ 102+ 259+  90+ 270+  71+ 285+  58+ 300+  50+ 334+  30+ 372-   6
39   8   74+ 388-  31
39   8   81751126 1000 14-  25              +   0+ 119+  50+ 129+ 100+ 159+ 126+ 177
39   8   82+ 152+ 199+ 167+ 217+ 189+ 221+ 200+ 169+ 218+ 133+ 232+ 118+ 260+ 101
39   8   83+ 300+  58+ 355+  10+ 393-  25
39   8   91760105 1300 15-  41              +   0+ 119+  50+ 129+ 100+ 159+ 126+ 176
39   8   92+ 152+ 202+ 167+ 217+ 189+ 216+ 200+ 171+ 222+ 126+ 239+ 114+ 265+  91
39   8   93+ 300+  60+ 332+  28+ 368-  13+ 390-  41
39   8   101760311 1100 20-  20              +   0+ 119+  25+ 123+  50+ 128+  75+ 139
39   8   102+ 100+ 155+ 125+ 174+ 150+ 192+ 168+ 216+ 175+ 217+ 189+ 209+ 194+ 218
39   8   103+ 200+ 196+ 210+ 160+ 225+ 132+ 250+ 111+ 275+  84+ 300+  61+ 325+  41
39   8   104+ 350+  23+ 375-  20
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39   A   111760407  800 24=  20              •    0+ 120+  25+ 123+  50+ 129+  75+ 140
39   A   112+ 100+ 157+ 125+ 175+ 150+ 195+ 175+ 220+ 181+ 220+ 18A+ 210+ 193+ 219
39   A   113+ 193+ 219+ 195+ 215+ 200+ 1A9+ 208+ 161+ 225+ 132+ 231+ 123+ 250+ 109
39   A   114+ 275+  A2+ 300+  59+ 325+  39+ 357+  12+ 380=   6+ 395=  20
39   A   121760609 1000 12=  2A              •    0+ 120+  50+ 130+ 100+ 158+ 150+ 196
39   A   122+ 175+ 218+ 184+ 212+ 190+ 218+ 210+ 148+ 240+ 113+ 300+  51+ 344=  17
39   A   123+ 400=  2A
39   A   131760708 1000 18=  31              •    0+ 120+  25+ 122+  50+ 130+  75+ 140
39   A   132+ 100+ 158+ 125+ 175+ 150+ 196+ 166+ 218+ 175+ 220+ 185+ 211+ 200+ 183
39   A   133+ 225+ 129+ 250+ 103+ 285+  63+ 300+  42+ 325+  14+ 346=   7+ 375+  31
39   H   141760727 1400 19=  21              •    0+ 120+  25+ 121+  50+ 128+  75+ 140
39   A   142+ 100+ 158+ 125+ 175+ 150+ 197+ 175+ 222+ 185+ 209+ 192+ 221+ 200+ 177
39   A   143+ 219+ 134+ 250+ 117+ 239+  97+ 250+  82+ 275+  62+ 300+  36+ 325+   8
39   A   144+ 350=  21
39   H   151761210  900 18=  23              •    0+ 120+  25+ 121+  50+ 127+  75+ 140
39   A   152+ 100+ 158+ 125+ 175+ 150+ 196+ 175+ 219+ 191+ 221+ 200+ 179+ 224+ 136
39   H   153+ 250+  A1+ 275+  70+ 300+  54+ 325+  33+ 350+  13+ 375=   5+ 396=  23
39   9   11750100 1300 15=  23              •    0+ 121+  50+ 133+  79+ 149+ 100+ 147
39   9   12+ 127+ 159+ 150+ 176+ 173+ 227+ 190+ 204+ 200+ 174+ 227+ 120+ 259+  98
39   9   13+ 292+  55+ 300+  4M+ 317+  32+ 362=  23
39   9   21750304 1300 17=  20              •    0+ 120+  50+ 134+  79+ 147+ 100+ 148
39   9   22+ 127+ 161+ 150+ 178+ 173+ 228+ 191+ 196+ 200+ 169+ 218+ 125+ 245+ 103
39   9   23+ 264+  79+ 277+  61+ 300+  46+ 322+  29+ 339+   8+ 363+  20
39   9   31750428 1300 20=  20              •    0+ 120+  50+ 133+  79+ 147+ 100+ 146
39   9   32+ 127+ 158+ 150+ 176+ 173+ 229+ 182+ 215+ 191+ 198+ 200+ 170+ 206+ 151
39   9   33+ 210+ 145+ 217+ 127+ 235+ 115+ 254+  96+ 277+  A5+ 300+  65+ 321+  38
39   9   34+ 356=   1+ 376=  20
39   9   41750502 1300 24=  20              •    0+ 120+  50+ 134+  79+ 166+ 100+ 146
39   9   42+ 127+ 158+ 150+ 175+ 173+ 226+ 182+ 217+ 191+ 199+ 200+ 174+ 206+ 155
39   9   43+ 210+ 145+ 217+ 130+ 228+ 118+ 242+ 109+ 264+  92+ 275+  76+ 292+  60
39   9   44+ 300+  55+ 309+  47+ 326+  28+ 353+   8+ 369+   0+ 385=  20
39   9   51750702 1200 20=   5              •    0+ 120+  50+ 133+  79+ 150+ 100+ 143
39   9   52+ 127+ 157+ 150+ 175+ 173+ 226+ 182+ 221+ 191+ 203+ 200+ 174+ 206+ 157
39   9   53+ 210+ 148+ 217+ 133+ 230+ 120+ 256+ 106+ 286+  74+ 300+  63+ 332+  38
39   9   54+ 353+  12+ 370=   5
39   9   61750904 1600 19=  25              •    0+ 121+  50+ 133+  79+ 147+ 100+ 149
39   9   62+ 127+ 159+ 150+ 177+ 173+ 227+ 182+ 213+ 191+ 196+ 200+ 167+ 210+ 143
39   9   63+ 222+ 124+ 240+ 114+ 264+  91+ 279+  80+ 300+  59+ 329+  32+ 355+   5
39   9   64+ 3A4=  25
39   9   71751028  900 18=  21              •    0+ 120+  50+ 134+  79+ 149+ 100+ 151
39   9   72+ 127+ 160+ 150+ 177+ 173+ 231+ 190+ 201+ 200+ 167+ 222+ 125+ 234+ 118
39   9   73+ 250+ 104+ 201+  92+ 276+  66+ 300+  46+ 340+  25+ 369+   2+ 387=  21
39   9   81751120 1100 15=  23              •    0+ 120+  50+ 133+  79+ 147+ 100+ 148
39   9   A2+ 127+ 158+ 150+ 175+ 173+ 227+ 190+ 199+ 200+ 168+ 227+ 126+ 297+ 100
39   9   A3+ 249+  A2+ 300+  71+ 345+  19+ 385=  23
39   9   91760105 1300 17=  51              •    0+ 120+  50+ 133+  79+ 145+ 100+ 148
39   9   92+ 127+ 158+ 150+ 175+ 173+ 229+ 190+ 199+ 200+ 169+ 227+ 125+ 248+ 103
39   9   93+ 267+  85+ 294+  72+ 300+  65+ 330+  29+ 365+   5+ 391+  51
39   9   101760311 1200 25=  36              •    0+ 121+  25+ 126+  50+ 135+  62+ 141
39   9   102+  66+ 150+  75+ 151+  81+ 148+ 100+ 147+ 116+ 158+ 125+ 158+ 150+ 174
39   9   103+ 175+ 225+ 176+ 226+ 178+ 226+ 192+ 204+ 200+ 180+ 213+ 145+ 225+ 126
39   9   104+ 250+ 103+ 275+  A2+ 300+  61+ 325+  37+ 350+  17+ 375=  16+ 392+  36
39   9   111760407  A00 22=  23              •    0+ 121+  25+ 126+  50+ 133+  62+ 140
39   9   112+  72+ 155+  82+ 149+ 100+ 148+ 125+ 159+ 150+ 175+ 155+ 183+ 177+ 227
39   9   113+ 179+ 226+ 196+ 187+ 200+ 181+ 213+ 146+ 226+ 126+ 250+ 105+ 300+  60
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79

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39   9    114+ 325+   41+ 338+   34+ 379-    1+ 399-  25
39   9    12176060Y 1100 13-   27            •    0+ 121+   50+ 133+ 100+ 147+ 127+ 157
39   9    122+ 173+  226+ 200+  162+ 219+  132+ 236+  111+ 250+   90+ 300+   48+ 334+  17
39   9    123+ 350-    1+ 385+   27
39   9    13176070H 1100 17-   33            •    0+ 120+   25+ 125+   50+ 133+   75+ 152
39   9    132+ 100+  149+ 125+  159+ 150+  175+ 176+  225+ 200+  175+ 219+  130+ 245+ 104
39   9    133+ 265+   78+ 279+   66+ 300+   27+ 323-    1+ 345-   21+ 360-  33
39   9    14176092Z 1500 17-   29            •    0+ 121+   25+ 126+   50+ 134+   75+ 149
39   9    142+ 100+  146+ 125+  160+ 150+  176+ 175+  233+ 200+  177+ 221+  131+ 246+  86
39   9    143+ 250+   75+ 275+   63+ 300+   36+ 325+    8+ 350-   13+ 375+  29
39   9    15176121b  900 18-   21            •    0+ 120+   25+ 126+   50+ 133+   75+ 150
39   9    152+ 100+  146+ 125+  158+ 150+  175+ 175+  229+ 197+  189+ 222+  137+ 230+ 122
39   9    153+ 250+   84+ 275+   68+ 300+   57+ 325+   33+ 350+    2+ 400-  21
39  10    11750106 1400 15-   24            •    0+ 130+   50+ 133+ 100+ 143+ 124+ 157
39  10    12+ 145+  198+ 150+  216+ 177+  202+ 200+  189+ 218+  140+ 231+  113+ 272+  89
39  10    13+ 287+   65+ 300+   49+ 321+   31+ 371-  24
39  10    21760303 1500 18-   20            •    0+ 131+   50+ 134+ 100+ 145+ 124+ 161
39  10    22+ 145+  203+ 156+  214+ 177+  200+ 195+  191+ 200+  169+ 218+  127+ 232+ 107
39  10    23+ 251+   92+ 258+   82+ 273+   60+ 288+   50+ 300+   40+ 326+   23+ 361-  20
39  10    31750428 1300 17-   20            •    0+ 129+   50+ 133+ 100+ 144+ 124+ 158
39  10    32+ 145+  201+ 156+  214+ 177+  201+ 195+  190+ 200+  182+ 212+  148+ 221+ 123
39  10    33+ 233+  102+ 259+   81+ 300+   56+ 318+   37+ 358-    1+ 379-  20
39  10    41750602 1300 19-   20            •    0+ 131+   50+ 133+ 100+ 144+ 124+ 158
39  10    42+ 145+  199+ 156+  216+ 177+  200+ 195+  189+ 200+  178+ 212+  146+ 221+ 123
39  10    43+ 232+  103+ 254+   85+ 282+   66+ 300+   54+ 327+   37+ 344+   17+ 358+   4
39  10    44+ 383-   20
39  10    51750702 1200 16+    0            •    0+ 131+   50+ 133+ 100+ 145+ 124+ 160
39  10    52+ 145+  199+ 156+  217+ 177+  201+ 195+  190+ 200+  182+ 212+  150+ 221+ 126
39  10    53+ 237+  107+ 262+   86+ 300+   54+ 337+   23+ 362+    0
39  10    61750909  900 17-   27            •    0+ 130+   50+ 133+ 100+ 145+ 124+ 161
39  10    62+ 145+  201+ 156+  215+ 177+  201+ 195+  190+ 200+  176+ 220+  125+ 233+ 109
39  10    63+ 255+   99+ 284+   78+ 300+   60+ 326+   37+ 350+   11+ 382+  27
39  10    71751028 1000 17-   31            •    0+ 131+   50+ 135+ 100+ 145+ 124+ 160
39  10    72+ 145+  197+ 156+  214+ 177+  200+ 200+  173+ 218+  133+ 233+  110+ 292+  98
39  10    73+ 263+   85+ 273+   67+ 300+   44+ 346+   22+ 379-    4+ 397+  31
39  10    81751126 1100 15-   28            •    0+ 130+   50+ 133+ 100+ 144+ 124+ 160
39  10    82+ 145+  202+ 156+  214+ 177+  200+ 195+  190+ 218+  132+ 232+  117+ 258+ 110
39  10    83+ 265+   83+ 300+   69+ 345+   19+ 382+  28
39  10    91760105 1400 15-   36            •    0+ 130+   50+ 134+ 100+ 148+ 124+ 163
39  10    92+ 145+  203+ 156+  213+ 177+  199+ 195+  190+ 218+  131+ 254+  112+ 288+  69
39  10    93+ 300+   56+ 334+   23+ 372-   13+ 392-  36
39  10    101760311 1200 21-   20            •    0+ 131+   25+ 132+   50+ 134+   75+ 143
39  10    102+ 100+  146+ 125+  159+ 150+  205+ 158+  216+ 175+  208+ 200+  190+ 206+ 167
39  10    103+ 212+  162+ 225+  130+ 232+  121+ 255+  113+ 275+   89+ 300+   64+ 325+  39
39  10    104+ 350+   14+ 375-   14+ 380-  20
39  10    111760407  900 17-   26            •    0+ 131+   25+ 132+   50+ 133+   75+ 142
39  10    112+ 100+  144+ 130+  164+ 158+  216+ 178+  202+ 200+  190+ 207+  166+ 211+ 163
39  10    113+ 231+  123+ 250+  117+ 275+   91+ 300+   58+ 344+   25+ 400-  26
39  10    121760609 1100 12-   32            •    0+ 133+   50+ 133+ 100+ 144+ 128+ 163
39  10    122+ 156+  215+ 186+  189+ 196+  191+ 223+  123+ 248+  114+ 300+   49+ 341+  11
39  10    123+ 390-   32
39  10    151760708 1100 18-   25            •    0+ 131+   25+ 133+   50+ 134+   75+ 143
39  10    152+ 100+  145+ 125+  159+ 150+  209+ 156+  217+ 175+  204+ 200+  181+ 208+ 164
39  10    153+ 227+  123+ 249+  114+ 274+   76+ 279+   58+ 300+   75+ 326-    4+ 350-  29
39  10    191760927 1500 21-   28            •    0+ 132+   25+ 131+   50+ 134+   75+ 143
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39 10  142+ 100+ 145+ 125+ 160+ 150+ 210+ 165+ 214+ 175+ 204+ 195+ 188+ 200+ 175
39 10  143+ 213+ 156+ 225+ 112+ 239+ 117+ 247+  91+ 272+  67+ 297+  39+ 300+  30
39 10  144+ 322+   6+ 347-  13+ 372-  2A
39 10  151761216  900 19-  20                 +   0+ 131+  25+ 131+  50+ 133+  95+ 142
39 10  152+ 100+ 143+ 125+ 158+ 150+ 20A+ 179+ 204+ 198+ 188+ 204+ 166+ 207+ 172
39 10  153+ 236+ 116+ 254+  A0+ 275+  65+ 30n+  46+ 325+  28+ 35n+  12+ 375-   4
39 10  154+ 400-  20
39 6A  161770728 1000 41- 237                 + 120+ 179+ 140+ 190+ 160+ 191+ 180+ 252
39 68  162+ 200+ 175+ 220+ 113+ 260+  71+ 30n+  54+ 340+  46+ 380+  21+ 420-   5
39 68  163+ 460-  17+ 500-  41+ 540-  62+ 580-  98+ 620+ 111+ 660+ 109+ 700-  94
39 68  164+ 740-  83+ 780-  A0+ A20-  A3+ 860n-  90+ 900-  96+ 940+ 105+ 980+ 119
39 68  165+1020- 120+1060+ 132+1100- 144+114n- 155+1180- 170+1220+ 183+1260+ 189
39 68  166+1300- 197+1340- 202+1380- 205+142n- 211+1460- 222+1500+ 225+1540- 230
39 68  167+1580- 231+1620- 237
39 68  171770811 1200 41- 231                 + 120+ 179+ 140+ 191+ 160+ 191+ 180+ 234
39 68  172+ 200+ 178+ 220+ 132+ 260+  72+ 300+  96+ 340+  93+ 380+  41+ 420+   2
39 68  173+ 460-  10+ 500-  21+ 540-  59+ 58n-  93+ 620-  107+ 660+ 107+ 700-  101
39 6A  174+ 740-  94+ 780-  90+ A20-  87+ A6n-  86+ 900-  89+ 940+  97+ 980-  106
39 68  175+1020- 116+1060- 126+1100- 141+114n- 153+1180- 166+122n- 175+1260- 185
39 68  176+1300- 192+1340- 193+138n- 203+142n- 210+1460- 215+1500- 220+1540- 225
39 68  177+1580- 228+1620- 231
39 6A  181771021 1430 49- 292                 + 120+ 177+ 140+ 191+ 160+ 193+ 180+ 234
39 68  182+ 200+ 177+ 220+ 129+ 260+  81+ 300+  61+ 340+  41+ 380+   4+ 420-  20
39 6A  183+ 460-  43+ 500-  78+ 540-  99+ 58n- 109+ 620+ 107+ 660+ 104+ 700-  99
39 68  184+ 740-  91+ 780-  88+ 820-  85+ 860-  85+ 900-  91+ 940n- 106+ 980- 123
39 68  185+1020- 134+1060- 149+1100- 199+114n- 168+1180- 178+122n- 189+1260- 202
39 68  186+1300- 205+1340- 217+138n- 245+1460- 244+150n- 242+1540- 297
39 68  187+1580- 254+1620- 269+1660- 271+170n- 274+1740- 276+178n- 285+1820- 281
39 68  188+1860- 285+1900- 286+1980- 292
39 6A  191771121  815 49- 252                 + 120+ 181+ 140+ 192+ 160+ 193+ 180+ 235
39 6A  192+ 200+ 177+ 220+ 131+ 260+  81+ 300+  51+ 340+  24+ 380-  20+ 420-  17
39 68  193+ 460-  71+ 500-  28+ 540-  41+ 580-  69+ 620-  84+ 660+ 122+ 780- 190
39 68  194+ 740-  159+ 780+ 165+ 820- 170+ 860- 171+ 900- 171+ 940n- 164+ 980- 154
39 68  195+1020- 145+1060- 137+1100- 128+114n- 145+1180- 147+1220- 169+1260- 192
39 6A  196+1300- 211+1340- 221+1380- 22A+142n- 232+1460- 238+1500- 239+1540- 237
39 6A  197+1580- 241+1620- 240+1660- 238+170n- 242+1740- 243+1780- 249+1820- 250
39 6A  198+1860- 252+1900- 252+194n- 247
39 6A  201780117 1430 49- 280                 + 120+ 180+ 140+ 192+ 160+ 193+ 180+ 233
39 6A  202+ 200+ 176+ 220+ 124+ 260+  74+ 300+  53+ 340+  14+ 380-   6+ 420-  50
39 6A  203+ 460-  65+ 500-  64+ 540-  60+ 58n-  55+ 620-  53+ 660-  55+ 700-  98
39 6A  204+ 740-  152+ 780- 176+ A20- 175+ 860- 184+ 900- 186+ 940+ 181+ 980- 184
39 6A  205+1020- 191+1060- 187+1100- 182+114n- 185+1180- 194+122n- 194+1260- 195
39 6A  206+1300- 201+1340- 214+1380- 221+142n- 228+1460- 230+150n- 234+1540- 241
39 6A  207+1580- 250+1620- 274+1660- 274+170n- 273+1740- 275+178n- 274+1820- 280
39 6A  208+1860- 269+1900- 262+194n- 256
39 6A  211780224 1015 49- 279                 + 120+ 179+ 140+ 194+ 160+ 192+ 180+ 233
39 68  212+ 200+ 175+ 220+ 127+ 260+  66+ 300+  67+ 340+  33+ 380-   1+ 420-  49
39 68  213+ 460-  56+ 500-  55+ 540-  5A+ 58n-  59+ 620-  56+ 660-  62+ 700-  76
39 68  214+ 740-  114+ 780- 113+ 820- 162+ 860- 162+ 900- 164+ 940n- 170+ 980- 165
39 68  215+1020- 165+1060- 165+1100- 171+114n- 176+1180- 175+122n- 180+1260- 186
39 68  216+1300- 195+1340- 205+1380- 221+142n- 226+1460- 234+150n- 238+1540- 249
39 68  217+1580- 255+1620- 260+1660- 265+170n- 270+1740- 275+178n- 275+1820- 279
39 6A  218+1860- 279+1900- 277+194n- 273
39 6A  221780411  945 49- 241                 + 120+ 178+ 140+ 192+ 160+ 190+ 180+ 235
39 6A  222+ 200+ 175+ 220+ 126+ 260+  77+ 300+  72+ 340+  41+ 380+  15+ 420-  35
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39 68  223+ 460=  52+ 500=  50+ 540=  48+ 580=  54+ 620=  56+ 660=  63+ 700=  74
39 68  224+ 740= 126+ 780= 155+ 820= 165+ 860= 164+ 900= 162+ 940= 160+ 980= 161
39 68  225+1020= 159+1060= 164+1100= 160+1140= 160+1180= 168+1220= 176+1260= 189
39 68  226+1300= 185+1340= 205+1380= 212+1420= 217+1460= 224+1500= 227+1540= 228
39 68  227+1580= 229+1620= 231+1660= 230+1700= 234+1740= 238+1780= 242+1820= 239
39 68  228+1860= 241+1900= 242+1940= 243
39 68  231781524 1000 50= 295        + 120+ 178+ 140+ 192+ 160+ 195+ 180+ 235
39 68  232+ 200+ 174+ 220+ 125+ 260+  85+ 300+  56+ 340+  43+ 380+  12+ 420=  37
39 68  233+ 460=  36+ 500=  37+ 540=  41+ 580=  44+ 620=  53+ 660=  66+ 700= 107
39 68  234+ 740= 128+ 780= 145+ 820= 157+ 860= 163+ 900= 165+ 940= 166+ 980= 165
39 68  235+1020= 163+1060= 161+1100= 162+1140= 160+1180= 162+1220= 167+1260= 175
39 68  236+1300= 185+1340= 192+1380= 200+1420= 200+1460= 223+1500= 235+1540= 235
39 68  237+1580= 253+1620= 265+1660= 270+1700= 285+1740= 285+1780= 295+1820= 295
39 68  238+1860= 295+1900= 295+1940= 285
39 68  241781717 1350 49= 282        + 120+ 177+ 140+ 191+ 160+ 193+ 180+ 235
39 68  242+ 200+ 175+ 220+ 126+ 260+  85+ 300+  62+ 340+  45+ 380+   8+ 420=  18
39 68  243+ 460=  16+ 500=  25+ 540=  33+ 580=  39+ 620=  55+ 660=  65+ 700=  89
39 68  244+ 740= 112+ 780= 134+ 820= 153+ 860= 158+ 900= 165+ 940= 165+ 980= 163
39 68  245+1020= 157+1060= 157+1100= 151+1140= 151+1180= 155+1220= 160+1260= 167
39 68  246+1300= 175+1340= 185+1380= 194+1420= 207+1460= 217+1500= 225+1540= 236
39 68  247+1580= 205+1620= 255+1660= 261+1700= 270+1740= 274+1780= 275+1820= 282
39 68  248+1860= 281+1900= 280+1940= 276
39 68  251780423 1430 49= 285        + 120+ 177+ 140+ 190+ 160+ 193+ 180+ 233
39 68  252+ 200+ 176+ 220+ 123+ 260+  84+ 300+  63+ 340+  47+ 380+  21+ 420=   2
39 68  253+ 460=  17+ 500=  19+ 540=  22+ 580=  32+ 620=  36+ 660=  64+ 700=  83
39 68  254+ 740= 108+ 780= 134+ 820= 158+ 860= 168+ 900= 168+ 940= 166+ 980= 165
39 68  255+1020= 157+1060= 155+1100= 153+1140= 151+1180= 155+1220= 160+1260= 167
39 68  256+1300= 174+1340= 185+1380= 200+1420= 217+1460= 214+1500= 217+1540= 233
39 68  257+1580= 238+1620= 255+1660= 256+1700= 261+1740= 284+1780= 277+1820= 283
39 68  258+1860= 285+1900= 285+1940= 279
39 68  261781010 1300 49= 278        + 120+ 177+ 140+ 192+ 160+ 195+ 180+ 235
39 68  262+ 200+ 176+ 220+ 133+ 260+  86+ 300+  75+ 340+  40+ 380=   7+ 420=  35
39 68  263+ 460=  48+ 500=  47+ 540=  34+ 580=  33+ 620=  44+ 660=  45+ 700=  54
39 68  264+ 740=  66+ 780=  87+ 820= 112+ 860= 136+ 900= 144+ 940= 145+ 980= 144
39 68  265+1020= 141+1060= 142+1100= 142+1140= 144+1180= 154+1220= 163+1260= 168
39 68  266+1300= 177+1340= 187+1380= 195+1420= 204+1460= 214+1500= 225+1540= 232
39 68  267+1580= 241+1620= 247+1660= 259+1700= 264+1740= 265+1780= 268+1820= 271
39 68  268+1860= 275+1900= 268+1940= 278
39 68  271781121 1405 49= 304        + 120+ 176+ 140+ 192+ 160+ 193+ 180+ 235
39 68  272+ 200+ 180+ 220+ 130+ 260+  95+ 300+  59+ 340+  25+ 380=   3+ 420=  25
39 68  273+ 460=  60+ 500=  57+ 540=  75+ 580=  57+ 620=  88+ 660= 105+ 700= 107
39 68  274+ 740=  98+ 780=  84+ 820=  88+ 860= 102+ 900= 113+ 940= 134+ 980= 135
39 68  275+1020= 137+1060= 148+1100= 152+1140= 158+1180= 166+1220= 184+1260= 184
39 68  276+1300= 187+1340= 192+1380= 203+1420= 220+1460= 222+1500= 228+1540= 240
39 68  277+1580= 250+1620= 249+1660= 272+1700= 263+1740= 259+1780= 265+1820= 273
39 68  278+1860= 266+1900= 304+1940= 279
39 68  281780110 1100 49= 265        + 120+ 177+ 140+ 192+ 160+ 193+ 180+ 234
39 68  282+ 200+ 176+ 220+ 123+ 260+  91+ 300+  30+ 340+   9+ 380+   1+ 420=   5
39 68  283+ 460=  12+ 500=  29+ 540=  78+ 580=  98+ 620= 111+ 660= 111+ 700= 112
39 68  284+ 740= 114+ 780= 114+ 820= 110+ 860= 116+ 900= 117+ 940= 125+ 980= 130
39 68  285+1020= 145+1060= 148+1100= 150+1140= 160+1180= 165+1220= 174+1260= 184
39 68  286+1300= 186+1340= 192+1380= 199+1420= 209+1460= 216+1500= 225+1540= 230
39 68  287+1580= 238+1620= 245+1660= 248+1700= 252+1740= 255+1780= 259+1820= 260
39 68  288+1860= 264+1900= 265+1940= 262
39 68  291780220  845 49= 301        + 120+ 178+ 140+ 192+ 160+ 192+ 180+ 234
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19 .4   292+ 200+ 176+ 220+ 131+ 260+   85+ 300+   39+ 340+    6+ 380=  45+ 420=   37
19 .3   293+ 160=   26+ 500=   33+ 540=   39+ 580=   58+ 620=   82+ 660+ 102+ 780= 115
19 64   294+ 740=  155+ 780=  155+ 820+  154+ 860=  162+ 900+  178+ 940+ 164+ 980= 144
19 68   295+1020= 147+1060= 130+1100=  111+1140= 122+1180= 147+1220= 151+1260= 169
19 68   296+1500= 188+1340+ 205+1380+ 215+1420+ 230+1460= 234+1500= 250+1540= 247
39 68   297+1580= 255+1620= 262+1660= 268+1700= 275+1740= 272+1780= 287+1820= 295
39 68   298+1860= 282+1900= 301+1940= 285
39 68   301790322 1515 49= 279          +  120+ 179+ 140+ 192+ 160+ 198+ 180+ 232
39 68   302+ 200+ 176+ 220+ 130+ 260+   80+ 300+   37+ 340+   23+ 380+  27+ 420=   32
39 64   303+ 460=   40+ 500=   35+ 540=   37+ 580=   35+ 620=   53+ 660=  77+ 700=  88
39 64   304+ 740=  114+ 780=  133+ 820+  145+ 860+  168+ 900=  154+ 940+ 162+ 980= 167
39 64   305+1020= 166+1060= 155+1100= 140+1140= 134+1180= 133+1220= 144+1260= 162
39 64   306+1300= 177+1340= 199+1380= 208+1420= 215+1460= 225+1500= 232+1540= 240
19 64   307+1580= 251+1620= 255+1660= 260+1700= 272+1740= 273+1780= 279+1820= 276
19 64   308+1860= 275+1900= 279+1940= 275
19 67   161771727 1000 41= 242          +  120+ 179+ 140+ 184+ 160+ 186+ 180+ 211
19 67   162+ 200+ 184+ 220+ 135+ 260+   77+ 300+   55+ 340+   50+ 380+  27+ 420+    5
39 67   163+ 460=   18+ 500=   35+ 540=   67+ 580=  107+ 620=  130+ 660=  139+ 700= 129
39 67   163+ 740=  112+ 780=   95+ 820=   87+ 860=   91+ 900=  101+ 940=  111+ 980= 117
19 67   165+1020= 125+1060= 137+1100= 145+1140= 147+1180= 172+1220= 185+1260= 191
19 67   166+1300= 201+1340= 205+1380= 211+1420= 215+1460= 225+1500= 230+1540= 232
39 67   167+1580= 233+1620= 242
39 69   171773411 1100 41= 236          +  120+ 180+ 140+ 185+ 160+ 187+ 180+ 213
39 69   172+ 200+ 182+ 220+ 135+ 260+   72+ 300+   57+ 340+   54+ 380+  32+ 420+    1
19 67   174+ 460=   13+ 500=   24+ 540=   62+ 580=  104+ 620=  128+ 660=  136+ 700= 120
39 69   174+ 740=  113+ 780=  105+ 820=   95+ 860=   92+ 900=   95+ 940=  102+ 980= 110
33 69   175+1020= 123+1060= 135+1100= 144+1140= 155+1180= 170+1220= 182+1260= 192
39 69   176+1300= 200+1340= 202+1380= 208+1420= 215+1460= 221+1500= 225+1540= 227
39 69   177+1580= 233+1620= 236
39 69   181771020 1500 49= 291          +  120+ 179+ 140+ 186+ 160+ 187+ 180+ 218
39 69   182+ 200+ 183+ 220+ 135+ 260+  133+ 300+   59+ 340+   33+ 380+   5+ 420=   17
39 69   183+ 460=   55+ 500=   89+ 540=  115+ 580=  120+ 620=  129+ 660=  121+ 700= 118
19 69   184+ 740=  109+ 780=   99+ 820=   95+ 860=   97+ 900=  108+ 940=  125+ 980= 140
39 69   185+1020= 154+1060= 167+1100= 176+1140= 187+1180= 195+1220= 203+1260= 216
39 69   186+1300= 223+1340= 235+1380= 236+1420= 241+1460= 251+1500= 255+1540= 263
19 69   187+1580= 263+1620= 271+1660= 275+1700= 282+1740= 278+1780= 281+1820= 284
39 69   188+1860= 291+1900= 264+1940= 277
39 69   191771121  715 49= 259          +  120+ 179+ 140+ 186+ 160+ 188+ 180+ 214
39 69   192+ 200+ 183+ 220+ 134+ 260+   81+ 300+   52+ 340+   23+ 380+  24+ 420=   21
39 69   193+ 460=   22+ 500=   29+ 540=   41+ 580=   68+ 620=   84+ 660=  112+ 700= 143
39 69   194+ 740=  161+ 780=  167+ 820=  169+ 860=  170+ 900=  169+ 940=  161+ 980= 154
34 67   195+1020= 145+1060= 127+1100= 117+1140= 120+1180= 137+1220= 154+1260= 175
39 69   196+1300= 196+1340= 212+1380= 223+1420= 231+1460= 236+1500= 238+1540= 243
39 69   197+1580= 247+1620= 245+1660= 250+1700= 244+1740= 244+1780= 257+1820= 259
39 69   198+1860= 259+1900= 258+1940= 250
34 69   201780117 1330 49= 281          +  120+ 179+ 140+ 187+ 160+ 187+ 180+ 215
39 67   202+ 200+ 180+ 220+ 125+ 260+   74+ 300+   52+ 340+   30+ 380=   9+ 420=   62
19 67   203+ 460=   46+ 500=   61+ 540=   64+ 580=   62+ 620=   55+ 660=  55+ 700=  95
39 69   204+ 740=  135+ 780=  175+ 820+  177+ 860=  181+ 900=  182+ 940=  182+ 980= 183
34 69   205+1020= 181+1060= 164+1100= 174+1140= 176+1180= 181+1220= 180+1260= 184
39 69   206+1300= 191+1340= 203+1380= 217+1420= 229+1460= 240+1500= 250+1540= 261
39 69   207+1580= 255+1620= 274+1660= 279+1700= 281+1740= 279+1780= 279+1820= 275
39 69   208+1860= 269+1900= 265+1940= 256
33 69   211780224  930 49= 280          +  120+ 179+ 140+ 186+ 160+ 185+ 180+ 215
39 69   212+ 200+ 183+ 220+ 125+ 260+   77+ 300+   65+ 340+   31+ 380=   4+ 420=   47
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39 69   213+ 460=   56+ 500=   61+ 540=   66+ 580=   64+ 620=   56+ 660=   58+ 700=   91
39 69   214+ 740=  130+ 780=  154+ 820=  168+ 860=  166+ 900=  175+ 940=  176+ 980=  178
39 69   215+1020=  179+1060=  181+1100=  189+1140=  191+1180=  191+1220=  193+1260=  194
39 69   216+1300=  193+1340=  211+1380=  223+1420=  229+1460=  236+1500=  245+1540=  252
39 69   217+1580=  257+1620=  263+1660=  267+1700=  272+1740=  275+1780=  278+1820=  280
39 69   218+1860=  280+1900=  280+1940=  275
39 69   2217A0011   830  49=  248             +  180+  178+  140+  186+  160+  185+  180+  214
39 69   222+ 200+  181+ 220+  128+ 260+   79+ 300+   71+ 340+   41+ 380+   11+ 420=   39
39 69   223+ 460=   51+ 500=   59+ 540=   55+ 580=   60+ 620=   60+ 660=   62+ 700=   68
39 69   224+ 740=  122+ 780=  164+ 820=  168+ 860=  172+ 900=  168+ 940=  164+ 980=  165
39 69   225+1020=  165+1060=  170+1100=  165+1140=  170+1180=  176+1220=  181+1260=  188
39 69   226+1300=  195+1340=  213+1380=  216+1420=  223+1460=  232+1500=  234+1540=  233
39 69   227+1580=  244+1620=  237+1660=  237+1700=  237+1740=  244+1780=  248+1820=  246
39 69   228+1860=  248+1900=  248+1940=  246
39 69   2317A0524   915  50=  298             +  120+  178+  140+  186+  160+  185+  180+  215
39 69   232+ 200+  180+ 220+  127+ 260+   85+ 300+   97+ 340+   45+ 380+   13+ 420=   30
39 69   233+ 460=   35+ 500=   37+ 540=   35+ 580=   35+ 620=   48+ 660=   71+ 700=  100
39 69   234+ 740=  138+ 780=  155+ 820=  170+ 860=  176+ 900=  180+ 940=  180+ 980=  182
39 69   235+1020=  178+1060=  175+1100=  175+1140=  173+1180=  174+1220=  177+1260=  186
39 69   236+1300=  195+1340=  205+1380=  215+1420=  225+1460=  240+1500=  248+1540=  255
39 69   237+1580=  265+1620=  270+1660=  280+1700=  287+1740=  285+1780=  290+1820=  896
39 69   238+1860=  297+1900=  298+1940=  292+1962=  285
39 69   2417A0717  1030  49=  285             +  120+  178+  140+  186+  160+  186+  180+  214
39 69   242+ 200+  182+ 220+  125+ 260+   84+ 300+   60+ 340+   11+ 380+   12+ 420=   15
39 69   243+ 460=   23+ 500+   35+ 540=   37+ 580=   56+ 620=   70+ 660=  101+ 700=  124
39 69   244+ 740=  137+ 780=  151+ 820=  170+ 860=  174+ 900=  177+ 940=  178+ 980=  177
39 69   245+1020=  173+1060=  170+1100=  168+1140=  165+1180=  165+1220=  169+1260=  176
39 69   246+1500=  185+1340=  195+1380=  206+1420=  216+1460=  230+1500=  240+1540=  248
39 69   247+1580=  253+1620=  260+1660=  268+1700=  273+1740=  278+1780=  283+1820=  284
39 69   248+1860=  284+1900=  285+1940=  277
39 69   2517A0025  1300  49=  296             +  120+  186+  140+  185+  160+  184+  180+  214
39 69   252+ 200+  180+ 220+  124+ 260+   84+ 300+   61+ 340+   49+ 380+   22+ 420=    4
39 69   253+ 460=   17+ 500+   24+ 540=   26+ 580=   36+ 620=   33+ 660=   65+ 700=   88
39 69   254+ 740=  122+ 780=  154+ 820=  170+ 860=  173+ 900=  177+ 940=  183+ 980=  178
39 69   255+1020=  174+1060=  170+1100=  171+1140=  165+1180=  165+1220=  170+1260=  178
39 69   256+1300=  188+1340=  199+1380=  207+1420=  217+1460=  234+1500=  245+1540=  253
39 69   257+1580=  258+1620=  267+1660=  273+1700=  283+1740=  288+1780=  286+1820=  295
39 69   258+1860=  295+1900=  296+1940=  287
39 69   2517A1016  1215  49=  283             +  120+  177+  140+  185+  160+  185+  180+  215
39 69   262+ 200+  182+ 220+  130+ 260+   84+ 300+   73+ 340+   39+ 380+    6+ 420=   45
39 69   263+ 460=   43+ 500=   45+ 540=   37+ 580=   37+ 620=   37+ 660=   40+ 700=   53
39 69   264+ 740=   74+ 780=  101+ 820=  121+ 860=  155+ 900=  168+ 940=  175+ 980=  170
39 69   265+1020=  165+1060=  172+1100=  165+1140=  166+1180=  174+1220=  175+1260=  183
39 69   266+1300=  191+1340=  195+1380=  205+1420=  215+1460=  225+1500=  235+1540=  245
39 69   267+1580=  248+1620=  257+1660=  265+1700=  268+1740=  270+1780=  276+1820=  278
39 69   268+1860=  282+1900=  283+1940=  279
39 69   2717A1121  1300  49=  285             +  120+  176+  140+  185+  160+  188+  180+  215
39 69   272+ 200+  181+ 220+  130+ 260+   88+ 300+   78+ 340+    8+ 380=   25+ 420=   39
39 69   273+ 460=   43+ 500=   63+ 540=   68+ 580=  102+ 620=  122+ 660=  119+ 700=  118
39 69   274+ 740=  121+ 780=  113+ 820=  100+ 860=  113+ 900=  125+ 940=  130+ 980=  135
39 69   275+1020=  150+1060=  161+1100=  157+1140=  165+1180=  168+1220=  174+1260=  182
39 69   276+1300=  195+1340=  207+1380=  227+1420=  218+1460=  226+1500=  216+1540=  242
39 69   277+1580=  247+1620=  256+1660=  260+1700=  265+1740=  270+1780=  275+1820=  279
39 69   278+1860=  282+1900=  285+1940=  275
39 69   2817A0116   945  49=  267             +  120+  178+  140+  185+  160+  186+  180+  215
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59 69   292+ 200+ 182+ 220+ 128+ 260+  86+ 300+  32+ 340+   9+ 380=   1+ 420=   7
59 69   293+ 460=  14+ 500=  34+ 540=  70+ 580=  98+ 620= 114+ 660= 108+ 700= 140
59 69   294+ 740=  10+ 780= 100+ 820= 100+ 860= 111+ 900= 123+ 940= 124+ 980= 135
59 69   295+1020= 145+1060= 153+1100= 158+1140= 161+1180= 172+1220= 176+1260= 183
59 69   296+1300= 190+1340= 195+1380= 203+1420= 212+1460= 222+1500= 227+1540= 235
59 69   297+1580= 234+1620= 250+1660= 255+1700= 255+1740= 259+1780= 263+1820= 265
59 69   298+1860= 265+1900= 267+1940= 264
59 69   291740220  740 69= 294           + 120+ 178+ 140+ 185+ 160+ 185+ 180+ 215
59 69   292+ 200+ 185+ 220+ 125+ 260+  82+ 300+  43+ 340+  10+ 380=  35+ 420=  59
59 69   293+ 460=  31+ 500=  32+ 540=  35+ 580=  55+ 620=  82+ 660= 107+ 700= 143
59 69   294+ 740= 158+ 780= 165+ 820= 168+ 860= 185+ 900= 190+ 940= 184+ 980= 184
59 69   295+1020= 165+1060= 144+1100= 135+1140= 131+1180= 141+1220= 161+1260= 180
59 69   296+1300= 195+1340= 210+1380= 225+1420= 231+1460= 235+1500= 245+1540= 253
59 69   297+1580= 258+1620= 264+1660= 264+1700= 275+1740= 294+1780= 284+1820= 272
59 69   298+1860= 280+1900= 282+1940= 275
59 69   291740220  740 69= 285           + 120+ 178+ 140+ 185+ 160+ 185+ 180+ 216
59 69   292+ 200+ 181+ 220+ 125+ 260+  81+ 300+  46+ 340+  25+ 380=   2+ 420=  41
59 69   293+ 460=  35+ 500=  35+ 540=  44+ 580=  53+ 620=  77+ 660=  82+ 700= 125
59 69   294+ 740= 154+ 780= 185+ 820= 175+ 860= 181+ 900= 179+ 940= 184+ 980= 175
59 69   295+1020= 161+1060= 155+1100= 146+1140= 127+1180= 124+1220= 144+1260= 163
59 69   296+1300= 175+1340= 203+1380= 210+1420= 224+1460= 233+1500= 237+1540= 240
59 69   297+1580= 222+1620= 257+1660= 265+1700= 270+1740= 271+1780= 285+1820= 283
59 69   298+1860= 275+1900= 274+1940= 273
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